

**CHANGING PATTERNS OF DEFENCE ARCHITECTURE AT
AIHOLE, BADAMI, PATTADAKAL (6TH -18TH A.D)
- A STUDY**

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AWARD OF THE DEGREE OF**

Doctor Of Philosophy

IN HISTORY

BY

UMESH PATTAR .Y

Under the guidance and supervision of

Dr. M. JAMUNA

**Professor, Department of History,
Jnanabharati, Bangalore University
Bangalore**



BANGALORE UNIVERSTIY

BANGALORE

2014

DECLARATION

*I hereby declare that the thesis entitled “**CHANGING PATTERNS OF DEFENCE
ARCHITECTURE AT AIHOLE, BADAMI, PATTADAKAL (6TH-18TH A.D) - A STUDY**”
submitted to Bangalore University for the award of the degree of Doctor of Philosophy in
History is the original work carried out by me under the guidance of Dr. M. Jamuna, Professor
and Chairperson, Department of History, Bangalore University, and that it has not been
submitted previously to any other Institution, including this University or published at any time
before for the degree of Ph.D.*

UMESH PATTAR Y

Umesh Pattar Y
Research Scholar
Department of History
Bangalore University

Place : Bangalore

Date:

Certificate

*I have the pleasure to certify that the thesis entitled “**CHANGING PATTERNS OF DEFENCE ARCHITECTURE AT AIHOLE, BADAMI, PATTADAKAL (6TH-18TH A.D) - A STUDY**” is the result of bonafide research carried out by Umesh Pattar.Y, under my guidance and supervision. The thesis conforms to the standard envisaged by regulations of the University. This Thesis or any part thereof has not been submitted for any other Degree or Diploma.*

(Dr.M.JAMUNA)
Professor & Chairperson
Bangalore University,
Bangalore 560 056

Bangalore

Date:

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PREFACE

Chalukyas of Badami who ruled over the vast areas of the South India from Narmada to Kaveri, known for their military strength had earned the title 'Karnataka Bala', which also finds a mention in several inscriptions. Inscriptions also speak of Chalukyas having conquered the islands of Revati and Rajapuri in the present States of Maharashtra and Odisha respectively. Badami, Aihole and Pattadakal were also important administrative and cultural centers. Badami which was strategically located was chosen as their capital after Aihole. Fortifications of all the three places besides Mahakuta and Alampur centres were also undertaken. The fortifications were their pride, it was a symbol of power built to protect citizens, temple complexes and treasury. Viragals also speak of the sacrifices made to protect these forts, temples assets, and the empire.

After the Chalukyas, these cities continued to be important centers under the successor powers down to Tipu. Narasimhavarmann Pallava is also said to have held sway for a short span of time. Inscriptions of the Rashtrakutas speak of Badami and Aihole being administrative centres and hence the fortification and reconstruction of the fort of Pulikeshi -1. Vijayanagara Inscriptions speak of the construction of a new fort at Badami as well reconstruction of old forts undertaken so as to safeguard Badami from the Bahamanis and the Shahis. The Nawabs of Savanur and later the Peshwas took hold over Badami. It then passed into the hands of the Mysore Sultans and Tipu added a new fort alongside renovation and reconstructions of existing forts. Badami, which was passed on from one power to the other itself, speaks of its historicity and relevance. Significance of Badami lies in the fact that the forts erected by various powers point to not only development of fort architecture but also exhibits the changing patterns of

defence technology down the centuries. Badami also stands forth as an example of being the only place to have had four fortifications ranging from 6th to 18th centuries.

Aim

To identify the forts belonging to four different periods and other structures that was built with the intention of defending the region. The architectural development of forts from early Chalukyan period to Tipu's period is taken into consideration. The thesis traces the changes that took shape in the building technology at Aihole, Badami and Pattadakal. The changing patterns of the plans, fort walls, bastions, structural patterns, magazines, tanks, watch towers, guard rooms, sculpture and the materials used during various periods have all been analysed to understand the changing needs of defence from time to time. There are no full-fledged scholarly works available on area of study. But for Badami forts having been briefly examined S.K Joshi in his Defence Architecture in Early Karnataka, (Chapter-IV), the other sites Aihole, Pattadakal, Mahakuta and Alampur have not received any attention. Hence this is an attempt in the direction.

Significance

Earlier studies undertaken by researchers have not thrown sufficient light on the fort in the region under study. Most of the works focus on temples, palaces and other such civil buildings and rarely focus on forts. For over 30 years there has hardly been any research undertaken on the forts of Badami, Pattadakal, Mahakuta, and Alampur in Mahbubnagar district in the state of Telangana which are connected with Chalukays of Badami. A genuine effort has been made to survey and trace the fortified walls buried under soil and thick vegetation especially at Aihole. Buried walls were also located in the agricultural lands. Extensive field work also enabled unearthing several remains of brick structures and pottery remains of pre-

Chalukyan period. Regular consultations with renowned Archaeologists, Historians, engineers, Artists was of immense help in the under taking of field work.

Aihole fort, which is considered to be oval in shape, has deviations near the Meguthi temple. It is a combination of Nela Durga and Giri Durga. In fact a new wall was discovered during the field the field work near the river Malaprabha river which is about 600 meters to the west side of the fort. This wall is located within the agricultural field of the Desai family of Aihole. Pattadakal on the other hand has been stated to be the first civil fort in Deccan by S.K Joshi. The thesis has made an attempt to document the entire stretch of the fort wall. Alampur important centre of art and architecture and has a Nela Durga where in the whole fort was measured during field work with the help of civil engineers whose services were sought for the study undertaken. Fort wall, next to river Tungabhadra is destroyed and is in ruins because of the construction work undertaken in recent times. As there is no conservation efforts in a few years even the existing ruins of fort may disappear. All parts of fort have been documented with diagrams, survey report, photographs and videography. The entire fort has been measured and documented in the thesis, and a comparative study has been undertaken. Mahakuta, a pilgrim centre has a cluster of temples within the fort wall. More than 18 temples are found. The measurement has been taken and documented. An ancient brick wall has been traced.

Area of Study

‘The Changing Patterns of Defence Architecture at Aihole, Badami and Pattadakal,’ focuses mainly upon fort architecture in the three places which well-known power centres and relevant politically, economically and were also important cultural centres. The study examines at length the defence architecture at Badami the only site that witnessed renovation and

reconstruction of the existing forts and addition of new forts from Pulakeshi-I to Tipu Sultan. Mahakuta and Alampur have briefly touched upon in the study. Structures located within the forts of Aihole, Badami, and Pattadakal such as temples, a dargah, civil Structures, sculptures, tanks have also been included in the study. The remains in the fort as well as inscriptional evidences point to the changing patterns of architecture commencing from Pulakeshi-I, followed by Rastrakuta, Vijayanagara and Tipu Sultan.

Beside the field work under taken at all the sites identified for the study visits were made to the forts at Malked, Halsi, Banavasi, Hanagal, Talikota, Bidar, Srirangapattana, Hampi, Majirabad, Devarahalli, Bangalore, Nandi, besides Srirangam, Tanjavur, Lothal, Agra, Delhi, Fathepur Sikri, Torana, Raigadh, Gwalior and Nabha (Patiala District). Visits to the above forts was for a better understanding of the types of forts, patterns of architecture, technology and other aspects of fort architecture.

Methodology

The study is based mainly upon field work undertaken at the sites identified. Available Primary and Secondary sources have been tapped. The entire fortification areas have been surveyed, measured and documented. Satellite pictures have also been captured and the same compared with the actual fortification area at the base level. Assistance of Civil Engineers, Architects, Artists, Assistant Archaeologists, Photographers and locals were sought for the study. Remains of the walls, pottery remains, Veeragals which have been unidentified as they were covered by soil and thick vegetation were unearthed during the exploration.

Review of Literature

There are innumerable standard works on religious art and architecture and many dealing with Badami Chalukyas in particular, with hardly any studies on fort architecture... S.K.Joshi in his 'Defence Architecture in Early Karnataka' has one chapter on Badami fort. There are many PhD thesis, and other works on sculptures, art, painting, cave temples etc, but hardly any work is available on defence architecture. In A.S.I Annual report, State and District Gazetteers, under the section references there are no books available about defence structures.

'Deccan Forts' of Kamalapur mentions the forts of Bijapur, Bidar and Raichur of medieval times without referring to the forts in the Bagalkot region. Works of Betageri Krishna Sharma and M. Chidananda Murty also have made passing references to forts. Sesha Sastry in his work, Karnatakada Veeragallugalu mentions about, war, musical instruments, weapons, flags, arms, and animals used in wars. The book has pictorial depictions of different types of bows and arrow on Veeragals or Hero Stones. Scholars have also studied the sculptures on forts, and Veeragals but they do not specifically mention Badami forts, though they speak of defence architecture and weapons used through the ages.

Thus there is no serious, systematic, authentic work giving an entire account of forts of Badami, at Aihole, Pattadakal, Mahakuta and Alampur. The thesis has thus tried to study these neglected forts. At Badami and surrounding areas mentioned above, a detailed survey of these forts was thus found necessary and therefore an intense research was undertaken.

The thesis is based on the actual field survey and Satellite pictures, maps, survey reports, scathes, line drawings all collated to understand defense architecture in response to changing political conditions from 6th century to 18th century along with advanced technology of armors and trends of wars.

Further, other manuscripts and available literary works on defence architecture like Arthashastra, Shilpa texts, Vishwakarmasamhita, Vedas have been referred for a study of Forts at Badami, Aihole and Pattadakal and surrounding sites in accordance with the important ruling dynasties and in chronological order from the period of Chalukyas to the period of Tipu has been traced.

The region of Badami, located in the hill range of Kalathgi which starts from Belgaum district and passes through Bagalkote. Badami naturally had no water sources but yet it was selected as capital by Pulakeshi-I in 543 A.D. Architects and engineers well versed in Shilpasastras and building forts, appears to have taken into consideration the regional ecological conditions such as the rock material, the topography of the region, the drainage system, forest, availability of natural resources building material and human resources etc., and, later accordingly the actual fort construction was done in accordance with architectural principles.

Chapterisation

The opening Chapter gives a glimpse of the development of fortification in India commencing from the Harappan to the modern times. Light is thrown on the various Shilpa Texts, Agamas, Epics, Manusumithi, Arthashastra and other works for an understanding for fort architecture in India.

In Chapter II traces the history of defence architecture from Satavahana to the times of Tipu Sultan.

Chapter III discusses the Historicity of Badami from pre historic to the modern times. The architectural developments during the various periods of history have also been examined.

The following Chapter IV has attempted a detailed study of the fortification at Aihole, Badami and Pattadakal in addition to Mahakuta and Alampur. Which were important political, economic and cultural centres of the Badami Chalukyas.

Chapter V focuses upon the developments after the Badami Chalukyas. The Fortification and defence technology adopted by the various dynasties – Rastrakutas, Vijayanagara down Tipu Sultan at Badami is discussed elaborately.

The focus of Chapter VI is a changing pattern in defence technology from the 6th to 18th century. An analysis of the changing architectural patterns, weaponry used compelling changes in technology have been made.

Chapter VII presents a summary of the findings. References are given at the end of the Thesis.

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LIST OF ABBREVIATIONS USED

ARIE	Annual Report on Indian Epigraphy, Archaeological Survey of India, Delhi
ARIE	Annual Report on South Indian Epigraphy, Archaeological Survey of India, Delhi
ASMAR	Archaeological Survey of Mysore ,Annual Reports, Mysore CII., Corpus Inscriptionum Indicarum (Volume IV , Part I)
DARKRBP	Digest of Annual Report on Kannada Research in Bombay Province (1940-41) Kannada Research Institute , Dharwad
EC	Epigraphia Carnatica Volumes, Mysore
EI	Epigraphica Indica Volumes, Archaeological Survey of India, Delhi
IA	Indian Antiquary Volumes
K.I	Karnataka Inscriptions Volumes, Kannada Research Institute, Dharwad
SII	South Indian Inscriptions Volumes ,Manager of Publications/ Director Epigraphy, Archaeological Survey of India, Delhi

INTRODUCTION

Forts are structures, often built with strong, protective surrounding walls and other structures for the defense of a territory during warfare as well as peace times. Forts solidified a rule in a region and also defended the territory from natural calamities. Several definitions of forts are available in various texts on architecture. The term fort in ordinary usage implies stronghold, which offers protection and security to all inhabitants who seek refuge in it. In Sanskrit, the term *Durga* i.e. a fort means that which is hard to approach, or difficult of access, or inaccessible.¹ In Vedic literature, it is referred to as *Pura*, meaning a fortified city, thus equating a city or town to a fort. The corresponding term for fort in Kannada is *Kote*, in Telugu it is referred to as *Kota* and *Kottai* in Tamil.

Primarily the forts were for defence from natural hazards like rain, wind, etc. and attack from outsiders. According to Columbia encyclopedia, “Forts are built in times of peace, designed to protect political, industrial, transportation, and communication centres”². That is, their importance is chiefly strategic, erected for strengthening a place of position, like town, capital city, economic centre, etc. The two important functions of the fortifications was, protection from enemy attacks and to make defence effective. Forts grew as corollary to the existing trends of warfare, which is one of the oldest aspects of human existence. ³ The nature of the defence structures depended upon the methods of attack and defence, the weapons used, military organization and the strength of the kingdom. In fact, forts were equally useful in offensive as well as defensive warfare.

Initially man started building houses to protect him from sun, rain, cold, and wind. Gradually structures were built to protect the community from natural calamities, wild animals and enemy attacks. Defensive walls came to be built around habitats. In the ancient

¹ Williams Monier: Sanskrit – English Dictionary, 1963, Motilal. Banarsidas Publications Pvt. Ltd, Delhi

² Paul Lagasse : 2000 „Columbia encyclopedia, Columbia University Press.

³ Charkravarti P.C. (1941): The art of war in Ancient India, Low Price Publication, Delhi P-14

period, people built mud forts, later they built forts with sun-dried bricks, and gradually used burnt bricks and finally stone blocks were brought into usage. With the advancement in science and technology particularly during medieval times, arms and ammunitions were introduced. Since medieval times, forts were built of huge blocks of stones and the height of the forts was also raised. Forts usually consisted of moats, gateways, bastions, watch towers, administrative buildings, sometimes residential quarters, at times royal residences, water storage facilities , granaries, magazines, as well as army quarters and guards rooms.

Moats, a very important characteristic of a fort, were defensive trenches serving the purpose of evading the attackers from scaling the fort walls. These ditches lined with stones usually were 20" to 45" deep. The moats were filled with water and crocodiles. The idea was to ward off the enemies from crossing over to climb the walls. If the enemy managed to cross, they were attacked by the army stationed within the fort. It is also said that if the enemy managed to scale the walls they would also be attacked by the defender using various means like:

1. Gegge/Dhimmi : wooden log
2. Benki Chandu :By throwing fire balls
3. Bandegallu : stones/boulders
4. Uriyenne -boiling oil
5. Nigi nigi Kenda: red-hot charcoal.
6. Chuchuva guta: long spear and other means⁴

The Arthashastra speaks of construction of three moats, around a fort.⁵ The moat attached to the fort wall was to be filled with water having crocodiles and poisonous snakes camouflaged with lotuses. The next moat is with clay or thorny bushes. The last moat was to be kept vacant so as to avoid animals venturing towards the fort as well as the enemy⁶. Gate ways were the main entrance of a fort or the fortress was another important part of the fort.

⁴ Gnananda.G : Kannada Mahabharathagalalli Shilpa Mattu Shilpi: A Thesis submitted for D.litt, Degree to Kannada University , Hampi. 2005, Sankriti Sahitya Pratishthana, Bangalore. PP- 372-373

⁵Rangarajan.L.N: Kautilya, The Arthashastra, 1992, Penguin books India. Ltd. New Delhi. P -183

⁶Ibid; PP-184 - 185

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On the sides of the gateways were usually Bastions, a projecting part so as to allow defensive firing in all directions. Besides, sharp nails were fixed to the doors so that elephants could not open these gateways. Watchtowers were also used to watch the movements of the enemy.

Later additional walls were constructed around the fort for better protection as seen in Chitradurga and Hangal forts. Huge cannons were fixed on the Bastions, also eyehole kind of openings were cutout at strategic points on the fort walls for firing, shooting of arrows and to watch the movement of enemy army. Such tiny openings are to be found at Badami's northern and southern fort. The capital cities of the dynasties/empires were fortified and within it were palaces, market areas, temples, shrines, and other structures of utility as evidenced at Hampi. The urban core here is clearly defined by a ring of massive fortifications, which encloses an approximately elliptical area (4 kms). Within this zone are also rocky ridges, flanked by long valleys and to the south and west are vast landscapes.

(a) Bastion

(b) Cannon

(c) Watch Tower

(d) Officers' Quarters



(e) Underground Magazine



(f) Graineries



(g) Upper Shivalaya



(h) Lower Shivalaya

Fig. 1 : Pictures of various structures of Badami Fort

When enemy troops planned an attack of the fort, they usually would camp outside the fort for many days or months. Once the supplies inside the fort were exhausted, the inhabitants of the fort had no choice but to open the gates and surrender to the enemy. The enemy troops camped was always at an advantage and would easily conquer the fort without much resistance. If the forts were captured it meant that the entire kingdom or provinces was under their control, so it was very essential to protect the forts from attack.

The forts had granaries to store grains as it was required to sustain the inhabitants of the fort especially when the forts were under attack and surrounded by enemies. They built underground magazines to store arms and ammunition within the forts. Loads of grains and

other requirements were stored so as to last for months as the gates were to be closed as long as the enemy troops camped outside the forts.

In order to fulfill the social and religious needs of the people the forts had within them temples, officers' quarters, palaces and other structures both civilian and military. People belonging to different classes used to live within the fort in specified areas allotted to them. Arthashastra gives a detailed description of the construction of forts. The work even specifies the place where the King was to build his capital that is in the centre of the country⁷. The site or capital was to be chosen by experts in the science of building. Arthashastra mentions that forts were to be constructed at the confluence of rivers or near a perennial lake; near an artificial tank (round, rectangular or square in shape, depending on the nature of the land) with canals to fill it. The place was to be well served by both land and water trade routes and be capable of being a market town⁸. As water was very essential for forts big ponds were excavated in large forts and artificial wells in small forts and *Donis* or small ponds cut out in hill forts or Giridurgas.

Armed forces were maintained within the forts for the purpose of defence; the structures related to army consisted of -

- a) Army quarters –where the soldiers were housed and training rendered for the force;
- b) Guard rooms-A space near the entrance of a fort where guards or sentries were stationed;
- c) Magazine – A place for the storage of gunpowder, arms and ammunitions. It is known as *Souterrain* meaning under earth. An underground chamber had a

⁷ Rajendran, P-184

⁸ Ibid; P-186

series of rooms dug in the ground or bedrock beneath a fort and similar other chambers to store supplies, ordinance.

- d) Powder magazine - A room or compartment usually lined with lead or copper and placed underground for storing gunpowder. However such magazines were introduced into the forts in the modern period.

Forts were part of people's lives. Administrative and social life was connected with forts. Settlement areas around the forts were named after these forts. Karnataka has a number of cities and towns named after the forts such as -

- Kote: Bagalkote, Melukote, H.D Kote, Hosakote, etc.
- Durga : Chitradurga, Savandurga, Ramdurga, Devarayanadurga, Haliyurdurga, Rayadurga ;
- Gadh (also meaning fort): Pavagad, Gajendragad, Sadashivagad, Amingad ;
- Kal also means fort: Mudugal, Hangal, Nijgal ;
- Giridurga or hill forts - Devgiri, Madugiri, and Channagiri.

Defence architecture has been found since ancient times. The Earliest cities that were fortified in India could be traced to Indus valley civilization.

Tracing the antiquity of fortification in India, it is necessary to study the basic settlement and habitation patterns in pre and proto historic time. The Neolithic phase in India was an agricultural and pastoral economy with settled habitation and domestication of animals, giving birth to a system of dwelling structures. Neolithic – Chalcolithic times had small open air sites, caves, and rock shelters.

The best example of this period is the rock shelters near Badami called *Shidalpadi* in which paintings and stone equipments were found. During this period, self defence being an important issue, thorn hedges, wooden stockades, cattle huts, and earthen walls, got erected.

The primitive types of fortification are found in the form of a great wall around *Kot Diji* and *Kalibangan*⁹. They were primarily meant to discourage animal and human intrusion. During the Harappan civilization structures similar to forts are to be found at *Kohtras Buti*, *Kot Diji* and *Mazena Damb* in Sindh provinces.

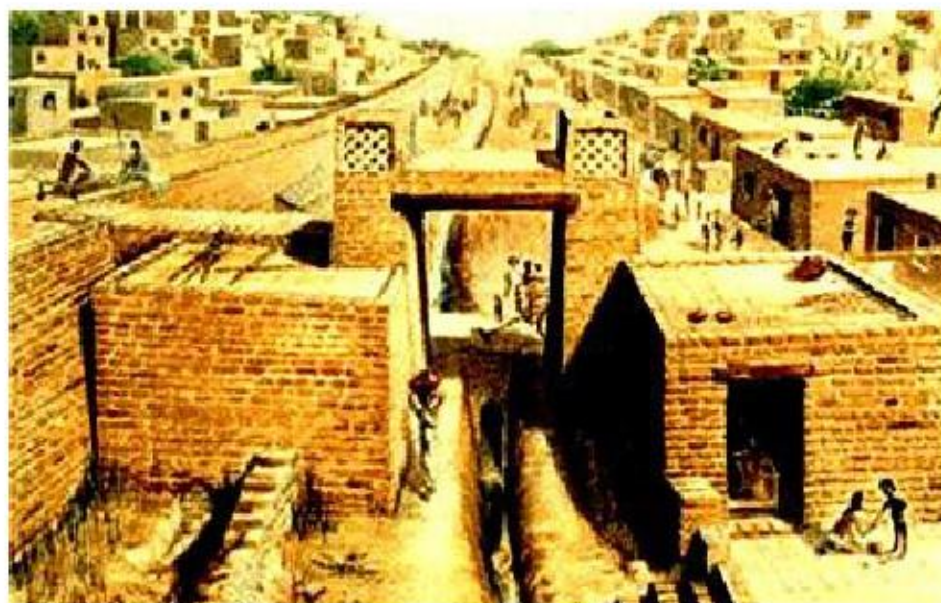


Fig. 2 : Harappan City (3500 B.C.)

Source: Indebo.com

The structures found are defensive walls, ramparts, towers etc¹⁰. As seen in the two big citadels at Harappa, its fortification mainly consisted of a defensive rampart of bund, above the flood level, built of mud and debris. Mohenjo-Daro, one of the biggest cities of Harappan civilization also had similar fortifications¹¹. The well planned urban nature of the cities reveals autocracy or symbol of power. As rightly said by Ramesh Menon about Lothal – “Lothal was where the Harappans lived 4000 years ago. It is one of the world’s richest sites of Indus Valley Civilization.

⁹ Lal, B.B and Thaper B.K: “Excavation at Kalibangan”, Indian Archaeology – A Review, Archaeological Survey of India – Annual Report- 1962-63, New Delhi- PP-19-20

¹⁰ Possell L Gregory: Ancient Cities of the Indus, 1979, Vikas Publishing House, Pvt. Ltd. New Delhi. P-18

¹¹ Ibid

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The first dockyard in the world was probably constructed by the inhabitants of Lothal. It was the largest dockyard which was ever built during Harappa period or Bronze Age for shipping cargo. The inhabitants of Lothal were no doubt an ingenious lot. Their engineering expertise in building the dockyard speaks for itself. It is considered most scientifically designed dock of the age¹².

During Vedic period a number of small states flourished. The term *Rashtra* was headed by a king or *Rajan* and below the *Rashtra* was the *grama* the smallest unit of administration of the State headed by the *Gramani*¹³. It was the duty of the *Gramani* to protect the people of the village from neighbouring principalities or tribes and even from wild animals. But with the rise of Paramountcy there was an increase in the wars among *Janapadas* or Tribal States. In course of time with the concept of *Digvijaya* or waging of victorious campaigns from all direction for attaining universal fame and glory, came into practice.

Wars were fought mainly due to boundary disputes, struggles for succession, personal gains, wealth, to gain political power, to occupy areas of strategic importance, to protect women and children, cattle etc. These certainly gave birth of defence in the form of forts and fortifications.

The nature and character of a fort depended largely upon the contemporary trends of warfare. While the war principles remained almost same, that is to say as the under-lying concept of a fort was defence, it remained constant from Harappan period to Colonial times. The fort as a structure underwent changes in patterns from time to time, varying in its shape, size, plan and materials of construction. The changing techniques of warfare were reflected through changes that the structure of forts underwent.

¹² Menon Ramesh (1980) : Discovering Lothal, Article published in the Mirror, 28th October, Bombay.

¹³ Srinivaschari.G & Nilakanta Sastri K.A. (1970): Advanced History of India, Allied Publishers Ltd., New Delhi. PP-38-41



Fig. 3 : Artist's imagination of Dwaraka City

Source:krishnaart.com

Vedic period was characterized by the appearance of Painted Gray Ware. With a well advanced agricultural and pastoral economy and some sort of political organization of the tribal state called *Janapadas*, headed by a Rajan, during this period, there are references to cities like *Kausambi*, *Rajagriha*, *Ahichhatra*, *Ujjain*, and *Dwaraka*, *Indraprastha* etc which were termed as *Pura* and were protected by ramparts of walls made of heaped earth¹⁴. The *Rigveda* mentions *Agni* and *Indra* as destroyers of forts, and invokes them in several hymns or *slokas* to display their powers and destruction of the forts of *daasas*. *Indra* is called as *Purandhara* meaning destroyer of forts¹⁵. At Kausambi, Ahichhatra and other places ramparts of mud with sloping sides and riveted with burnt brick are found. Similarly at Rajagriha, the

¹⁴McKim Malville, Lalit M & Gujral (2000): Ancient Cities, Sacred Skies Cosmic Geometrics And City Planning in Ancient India Indira Gandhi National Centre For The Arts, New Delhi. PP - 120 - 127

¹⁵Shendge J.Malati (1977): The Civilized Demons: the Harappans in Rig Veda, Shakti Malik Abhinav Publication, New Delhi-PP -15-16

excavated and textual data reveals that, there seems to have been a fairly consistent concept of the layout of urban centres, although the plan was not invariably adhered to ¹⁶. The town is said to have been enclosed by a moat or a rampart.

Mahabharata and *Ramayana* also refer to forts and fortifications. The term *Vapra* and *Chhaya* meaning ramparts or earth of mud are found in the epics. The *Adiparva* of *Mahabharata* refers to the city of *Indraprastha* as protected by a wide moat, lofty walls and several gateways¹⁷. The city of *Ayodhya* in *Ramayana*, is described as surrounded by deep moat all round, and was guarded by huge gateways and towers¹⁸. *Kishkinda*, the city of *Sugriva* was a forest fort provided with golden gates, moat and citadel ¹⁹. Lanka the capital of *Ravanna* was typical of a mixed fort, furnished with four huge gates, and four bridges situated in midst of sea which could be considered as a *jaladurga*²⁰. The Buddhist *Nikaya* and *Jataka* literature also make stray references to forts and fortifications. The *Nikaya* mentions a border city defended by strong ramparts and towers and provided with a single gate indicating that borders were strongly fortified. The *Maha Ummagga Jataka*²¹ states that the city of *Vaisali* was surrounded by a rampart near the gates. Panini also mentions moats around cities and gives technical names like *Parikha* (Moat), *Prakara* (Rampart), *Dwarah* (Gates)²²

During Mauryan period the political and military conditions of the period especially, in the face of foreign invasions required strong fortification. Kautilya's *Arthashastra*, dealing with the art and science of administering the State emphasizes the need for strong forts. Kautilya for the first time-included forts among the seven constituent elements of sovereignty of the State called *Saptanga*.

¹⁶Thapar Romila (2002): *Early India from the Origins to AD 1300*, Penguin Books India Pvt. Ltd, New Delhi. P-144

¹⁷*Mahabharata: Adiparva*, 1978, Gita Press, Gorakhpur PP-121 and 8-12

¹⁸Battacharya, H.C(ed) : *Ramayana* (edited with the commentary –*Ramayanatilaka* of Ramanujacarya, 1886, Vol- 7, Calcutta

¹⁹*Ibid*;

²⁰*Ibid*;

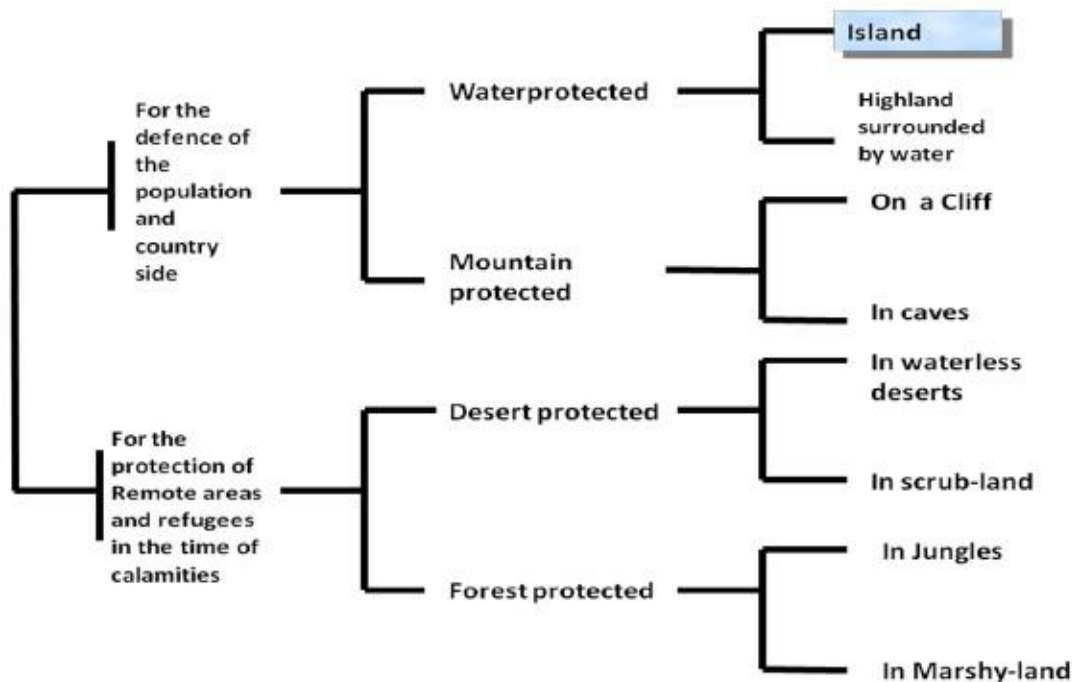
²¹Malalashekara : 2003 *Dictionary of Pali Proper Names*, Vol-2 Asian Educational Services. New Delhi. P-25 and P-994

²²Vasu Chandra Srisa: 1962, *The Ashtadhyayi of Pannini*, Motilal Banarsidas publishers private limited, Delhi. PP-121-123

Table 1: The Constituent Elements of a State of Kautilya

Sl.No.	Designation	Meaning - Coverage
1	Rajan	King;
2	Mantri/ Amatya	The group of Ministers, Councilors, Ministers and other high officials
3	Desa	The territory of the state along with the population inhabiting it (the janapada)
4	Durga	The fortified towns and cities
5	Kosa	The treasury – the wealth of the state
6	Bala	Army(defence, law and order)
7	Mitra	Friend – allies

Saptanga is indicative of the importance given to forts. He emphasizes that the king erects forts not only around the capital but also at the frontiers of the kingdom. Kautilya divides forts into four classes as Adak (water), Pervade (hill), Dana (desert) and Vane (forest)²³

**Fig. 4 : Classification of Forts by Kautilya**

²³ Rangarajan.L.N: Kautilya, The Arthashastra, 1992, Penguin books India. Ltd. New Delhi, PP-184-194

As regards the plan or shape of the fort, Kautilya prescribes circular (vrutha), rectangular (dirhamchaturasra) or square (chaturasra). While choosing the site of a fort, he warns that care should be taken to see that it does not get exposed to external dangers. Hence, he says that the capital city shall be in the centre of the kingdom, preferably on the bank of the confluence of rivers or a deep pool of perennial waters. Further, Kautilya deals with parts of architectural adjuncts of a fort, the method of their construction, disposition, shape etc. According to him, a fort shall have three ditches of triple moat, (parikha) outside the rampart, with an intermediary distance of danda or 6' from each other, and 14, 12, and 10 dandas in width, with a depth of not less than one quarter from ground level²⁴.

Kautilya then says that several roads like the chariot path, elephant path etc., are to be laid within the fort area. He further states that the approaches to the fort outside the rampart were to be properly obstructed by erecting knee brakers (Janubhanjani), a trident, earth pits, thorny bushes etc. In the centre of the fort was to be the palace which was to north or east. The work further says that authorities store sufficient quantities of weapons and essential commodities such as oils, grains, salt, medicines, articles, dry or fresh vegetables, dried flesh, hay stock, firewood, metals, hide, charcoal, tendons, poison, horns, bamboo, timbers, armour, and skins²⁵. This is indicative the importance of a fort and the significance of it being possessed by a king.

Arthashastra mentions eight kinds of forts with natural defences. (See fig Kautilya further says that Neladurga or Bhudurga, the land fort is the easiest to capture. Jaladurga is river fort more difficult and the Giridurga mountain fort most difficult. He Classifies forts as -

- a) *Audaka*: Water fortification such as in island in the midst of a river or water body;
- b) *Parvata*: mountainous such as a rocky tract;

²⁴ Ibid;

²⁵ Sastry Shama. R: Kautilya's Arthashastra, (1915) Mysore Printing and Publishing House, Mysore. P-78

c) *Dhanvana*: Desert such as a wild tract devoid of water and over grown with thicket growing in barren soil;

d) *Vana (Forest)*: full of water and thickets

e) *Nitisara of Kamandaka* mentions

(i) *Audaka (water)* b. *Parvata (hill)* c. *Vraksha (tree)*;

(ii) *Airina (desert)* f) *Dhanvana (wild tracts)*²⁶;

Manusmriti classifies forts into 6 groups -

1. *Dhanva Durga*: desert surrounded by a wild and waterless tract within a radius of five yojanas.
2. *Mahi Durga*: built by either stone or brick, this fort should have entrance gates, spacious court yards and surrounded by high ramparts;
3. *Ab Durga*: encircled by deep waters;
4. *Vruksha Durga*: surrounded by tall and huge trees, wild and thorny bushes, creepers etc.
5. *Nri Durga*: Troop fort consisting of elephants, horses, chariots and foot soldiers who protect it on all sides.
6. *Giri Durga*: situated on the top of inaccessible hill, having only one entrance, with water inside and fruit bearing trees

.Sukranitisara classifies forts into eight types -

1. *Parikha Durga*: fort surrounded by moat;
2. *Parigha Durga*: Mud, Brick or Stone high wall;
3. *Vana Durga*: encircled by thorns and clusters of trees;
4. *Dhanva Durga*: To empty out or to remove water;
5. *Jala Durga*: encircled by water;

²⁶ Ibid ;

6. Sainya Durga: usually consisting of about sixty men, commanded by a captain; the unit of formation of cavalry, corresponding to the company in infantry.

Brihatsamhita²⁷ considers only 3 kinds of forts. They are (1) Giridurga or Hill fort, (2) Salila or water fort (3) Atavka or forest fort. Nitivakyaamritam of Somadevasuri and **Yuktikalpataru** of Bhoja broadly classifies forts into two groups (1) Svabhavika – Natural forts supported by natural facilities like high hills, or rock boulders, water resources, forest etc, (2) Aharya – Artificial forts provided with ramparts, fire weapons, food grains, entry and exit ways., **Manasollasa**²⁸ or **AbhilashitarthaChintamani** mentions nine kinds of forts, but specifies only four, they are Salila, Vana, Maru, and Nara.

Out of **18 Puranas** only *Agni Purana*, *VayuPurana*, *VishnuPurana* and *Markandeya Purana* mention about forts and fortifications. According to these Puranas Giridurga, Jaladurga, and Vanadurga are natural forts and of all varieties the Giridurga or Hill fort gained universal respect for its strength.

Shilpa texts such as ShilpaSastra Vastu, Sutropanishad, Mayamata Vishwakrama, Samhitayagna, Yudhagalu kasyapa Shilpa Shastra, Vishwakarma Vastu, Manasara mention about city or fortification²⁹. The Manasara and Vastu Sutropanishad, while dealing with Grama, Nagara Vinyasa, Temple town vinyasa, deal with layout of village, town and city. They describe eight kinds of townships, which are to be protected by ramparts, ditches, gates, towers, etc., if it is evident in these works that every city was invariably fortified the Manasara classifies them as:-

²⁷ Sastri. V.S: Brihat Samhita (1947) vol VII, and VIII, M.R Publications, Delhi. P-56

²⁸ Joshi Mahadev Narayan Rao (2003): Art and Science in Manasollasa, New Bharatiya Book Corporation. New Delhi. PP-57-58

²⁹ Gnananda: Vastu Purusha- NeleHinnele, (1992), Sanskruthi Sahitya Pratishthana, Bangalore.

1. *Dandaka*: Having four angles, and consequently four sides; tetragonal in shape, surrounded by a square wall having four gates, that is north, east, west, south gates, or gate ways like in the Srirangam in Tamil Nadu or Guruvayur Temple in Kerala. It prescribes that they should have the temple of Lord Vishnu in the quarter presided over by Varun or Mitra;
2. *Sarvatobhadra*: Strong from all sides, quadrangular in form, with a ditch around it and four large and many smaller gates in the middle at angular points;
3. *Nandyavarta*, (Abode of Happiness): Having greater length than breadth in shape with the interior divided into four quadrants having 3 to 7 streets in each
4. *Padmaka* : (like lotus flower) town with strong fortress all round, with a moat and rampart, having 8, 12, or 16 faces in the outer wall
5. *Svastika* :(beyond human comprehension) provided with a moat and rampart, and two entrance gateways, one on each side of the outer wall,
6. *Karmuka*: Bow type or Semicircular
7. *Prastara*: It should have four central gateways.
8. *Chaturmukha*: Having four faces of gates, either square or rectangular oriented form east to west.

Manasara has another division of fortification based on function or nature, such as 1) *Sibira*: royal camp 2) *Vahini Mukha*: Military base away from Battlefield 3) *Sthaniya*: capital city 4) *Dronaka*: fort near water body 5) *Srnviddha*: fortune place 6) *Kolaka*: situated in a hilly or wild tract. 7) *Nigama*: outpost for vigilance 8) *Skandahvara*: Military encampment.

Mayamata : also classifies forts and the cities and divides them into fourteen kinds as

1. *Grama* 2. *Khetaka* 3. *Kharvata*, 4. *Durga*, 5. *Nagara*, 6. *Rajadhani*, 7. *Pattana*.
8. *Dronakamukha*, 9. *Sivira*, 10. *Skandhavana*, 11. *Sthaniya* 12. *Vihambaka*, 13. *Nigama* and

14. Sakhangara. *Visvakarma Vastu* a written composition on forts and fortifications, discusses architectural principles and speaks of there being twelve kinds of forts based on their location:-

1. Giridurga: Term is used differently to mean Girisanu, Girmadhya, Girmurdhni, which means fort on foot hill, slopes of hill, in their midst, protected by well armed soldiers.
2. Vanadurga: Situated in the interior or central part or place; the middle; of deep forest are of three type (a) Urdhava: situated on naturally high land (b) Bhudurga: situated on ordinary plain (c) Antastha: Dependent upon underground secret ways or situated within the earth, or underground passages.
3. Salila: Water fort, surrounded by a great sea or river, with underground passage, chariots, and walls.
4. Daivata: Divine fort or fortification that which has land route endowed by natural facilities like valleys, ditches etc.
5. Ekamukha, Dwimukha and Chaturmukha: this are forts with one, two, and four entrances respectively built nearby river, mountains etc
6. Karmukha: Bow type erected in the midst of a forest or on the slopes of hills, temporary in nature built of either brick or mud.
7. Prabhu: or else kings fort, should be built in the interior or central part or place; the middle; of deep forest or hill surrounded by deep moats, should have minimum gates with watch towers, here it is mentioned that entrances should be either in the east or north.

According to *Silpa Ratna*³⁰, forts are of seven kinds that is Mountain, the Forest, the Water, Airina, the Daivika, the Dhanva, Kirtka, in the order. The first 6 types are same only

³⁰ Raj Kumar (2003). Indian Art and Architecture, Disvoery Publishing House, New Delhi, P-163.

Divya or Daivika is different. Daivika forts are described as protected by demigods like Indra, Varuna, Guha, Jayanta, Vaijyanta, Asvni Devatas, Shiva, Durga and Sarasvati.

In a brief study of different works on vastu, art and architectural science, it may be said that the classification of forts, their changing patterns primarily depended on the site selected and on the shape or plan of a fort. The five main plans of the forts are (1) Vritta-circular (2) Chaturasra -square (3) Dirghachaturasra- Oblong (4) Vrittayata -Semi circular, (5) Golavritta- fully circular³¹. It is thus evident that the forts differed from each other is size, or proportions, architecture and technology, based on the mode of defence. There is also reference to the materials used in the construction of forts. Manasara, Manusmriti and Arthashastra speak of Mahi and Pankadurgas built of brick, clay, mud and Giridurgas built of stone, brick or mud, but for Vana Durga and Maru Durga wood was used extensively.

Manasara, Manusmriti and Kautilya's Arthashastra, mention that Mahi and Pankadurgas are built of brick, clay or mud, Giridurga should be built of stone, brick or mud, Vana Durga and MaruDurga to be built of wood. Hence by tracing the types and material used the antiquity of forts of different periods becomes evident. A study of the material indicates the way man tapped nature and put the material available to the best use down the ages. Changing patterns of fortification also point to the human efforts or creativity. Archaeological evidences, inscriptional sources, ruins of the forts including moats, bastions, help in an analysis of the scientific and technological knowledge and the changes from time to time.

As far Karnataka is concerned, it is home to several Pre-historic and historic sites. In its upper reaches, the Krishna River has a moderately meandering course cutting through the Deccan trap, further down it flows through Precambrian Kaladgi sediments, comprising

³¹ Joshi.S.K : Defence Architecture in Early Kamataka, (1985) Sandeep Prakashan , New Delhi .p -145

conglomerates, sandstones, quartzites, chert, limestone and shales. There are many Neolithic settlements in Bagalkot districts. A large number of pictographs, tools and other remains have been discovered. It is said that the drawing of boar and deer seen at Badami and Aregudda have a close similarity with the micrographic drawings of Bhimbetka.

Neolithic settlements are having been found on the hills, caves, and rock shelters. Habitations of the same period have been discovered at Sanganakallu, Tekkallakota, and Hallur. Similar settlements are to be seen in the close vicinity of Chalukyan temples at Badami, there are several shelters with old rock paintings at Aregudda, Badami, Benakal and Tekkalkota sites all of Neolithic period. Around the settlement areas blocks of stones were piled up along with thorny bushes for securing the area. The significance of these settlements shows that defence was one of the considerations of prehistoric dwellings. Thus, the beginnings of a fort or fort like structure may be traced back to the pre historic dwellings, however primitive in form.

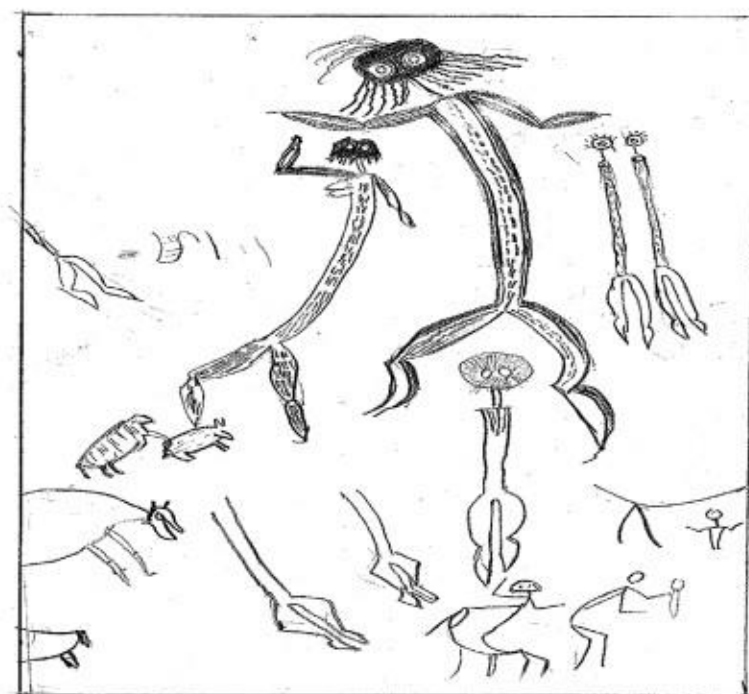


Fig. 5 : ‘Masked Human Figures and Animals – a Painting from Badami

The Krishna River is one of the east flowing rivers in peninsular India. Originating at Mahabaleshwar plateau, at an altitude of about 1.337m above sea level, it flows across the entire breadth of the Peninsula from west to east through the states of Maharashtra, Karnataka and Andhra Pradesh before joining the Bay of Bengal. Some of the important tributaries of the Krishna River are Malaprabha, the Ghataprabha, the Tungabhadra, the Bhima, the Ghod and the Hunsgi. It is on the Malaprabha river basin that Pattadakal, Aihole, Badami, and Mahakuta the regions under study are located.

□□□□□

HISTORY OF DEFENCE SYSTEM IN EARLY KARNATAKA

The State of Karnataka forms the south–western portion of the Indian Peninsula.

Physiographically it has three distinct units:

1. The coastal area bordering the Arabian Sea.
2. The central mountainous region, and
3. The Eastern Plateau.

As far as geographical features are concerned, the eastern plateau region shows a rolling topography. The streams traverse the varied geological formations. Archaeans, Cuddapahs (Kaladgis) and Deccan Traps have greatly influenced their Valley forms.¹ Typologically the lower Paleolithic cultures by and large display late or advanced Acheulian forms. This is particularly the case in the Kaladgi area of north Karnataka. i.e. the (Malaprabha –Ghataprabha Basins). There are several Palaeolithic sites in the Kaladgi Basin like Badami, Khyad and Mensagi areas of the Malaprabha River, where many tools have been unearthed from the streambed.

Beginning with the prehistoric past and moving ahead with times through several long centuries, the fertile land of Karnataka has played a prominent part in developing the culture and heritage of Indian history. Thus the historicity of Karnataka may be dated back to 60 -70 lakhs years² The rich heritage of Karnataka seen in field of art, architecture,

¹ Joshi ,R.V. (1955) : Pleistocene Studies in the Malaprabha Basin, Kamataka University Press, Dharward,

² Bijapur District Gazetteer 1999:(ed) by R.Muniswamy, Government of Karnataka, Cauvery Bhavan, Bangalore.P-43

literature, language and religion, has in no way been less important than those in the contemporary neighboring kingdoms around her in the past.

Between AD 325 – 1686 A.D., Karnataka was ruled by Kings of Satavahana, Kadamba, Ganga, Chalukyas of Badami, Rastrakutas, Chalukyas of Kalyana, Yadavas of Devagiri, Hoysalas, the Vijayanagara rulers and their contemporaries – Bahamani Sultans, Adil Shahis of Bijapur, Wodeyars of Mysore, Hyder and Tipu. These dynasties have been responsible in creating the strongholds with well fortified walls around their capital cities and sub capital cities keeping in view protection using the arms and armours within the forts to protect queens, treasury, wealth, women, children, palace and the administrative centre.

Several kings of the dynasties of early Karnataka proved their prowess by winning many decisive battles in the neighboring regions. Frequent battles necessitated building of forts, equipped with vigilant soldiers and arms to protect their capital cities, like Paithan or Pratishthana of Satavahana, Banavasi or Vyjayanti of Kadambas, Badami or Vatapi of Chalukyas, Rashtrakutas of Manyakheta or Malkhed., Doorasamudra of Hoysalas, Hampi of Vijayanagara, Bijapur of Adil shahis, so also Tipu Sultan, the Nayakas, Palegaras etc. to name a few. The defence architectural creations within and outside their capital places came up due to such political compulsions. Forts were basic element for administration. These various dynasties have left epigraphs as evidence of their active role in political, economic, social and ecclesiastical spheres. However, these epigraphs throw light on various aspects of culture particularly religion and architecture, and less on defence architecture like forts, ramparts, etc.

In ancient period, the geographical and geological aspects were conducive for flourish of various kingdoms. In fact this should not be lost sight of while understanding the political and other aspects of cultural development especially history of defence system in early Karnataka. The defence system in Karnataka has a continuous and unbroken history right from the period of Ashoka up to modern times. The Forts of Karnataka are hundreds in number. Forts have undergone structural changes by renovations and several additions, from time to time.

Some of the early historic cultural centres identified have been Sannati, Halasi, Vadagaon, Pattadakal, Aihole, Badami, Piklihal, Kurugodu, Maski, Brahmagiri, Hallur, Balligave, Chandravalli, Kuntibetta, Hemmige and T.Narasipura. All these sites have shown different antiquities of the early historic culture either as a single site or in combination. What really constitutes the early historic culture in all its aspects may be understood from the chart below.

Table 2.1 : Archeological remains of Satavahana Period found in various places of Karnataka

Name of the sites	Archeological Remains						
Chandravalli	RKP	SC	BSCPTF			RW	
Brahmagiri	RKP	SC	BSCPTF			RW	
Banavasi	RKP	SC	BSCPTF			RW	
Sannati	RKP	SC	BSCPTF			RW	
Vadagaon	RKP	SC	BSCPTF				IP
Pikhihal	RKP		CP				
Hallur	RKP		CP			RW	
T.Narasipur	RKP		CP				
Hemmige	RKP		CP				
Maski	RKP		CP			RW	
Kuntibetta	RKP					RW	
Balligave	RKP						
Pattadakal	RKP						
		SC					
(RKP: Russet Coated Kaolin Painted ware; SC: Satavahana Coins; BS: Brick structures; CP: Contemporary Pottery; TF: Terracotta Figurines; RW: Rouletted Ware; IP: Inscribed Pottery)							

From the given chart it becomes clear that the early historic culture in Karnataka was of mature phase. „With strong defence architecture going back to this period, it may even be suggested as the beginning of urbanization in the area.³



Fig. 2.1 : Ashokan Inscription in Karnataka (Maski)

Source: travelblogspot of Karnataka.com

Referring to historic period, one can trace the definite beginning of the History of Karnataka; from the period of Mauryas or i.e. precisely to the third century B.C., when Maurayn Emperor “Devanama Priya Priyadarsi Ashoka” held sway over some of the northern parts of Karnataka. Ten minor Rock Edicts and Four Major Rock Edits belonging to the period of Ashoka have been found at Chitadurga, Bellary, Raichur and Gulbarga Districts, viz ; at Siddapur, Brahmagiri, Jattingaramesvara, Maski, Koppal, Nittur, Udayegolla, and Suvarnagiri. This southern province was said to have been the boundary of his empire extending in the Deccan. Mauryas were succeeded by the Satavahanas that is

³ Narasimha Murthy (1997): (ed) Excavations at Banavasi, Directorate of Archaeology and Museums, Mysore p-134

from 300 BC to the beginnings to the Christian era, in Karnataka. Practically there appears to be no fortifications activity as such during these periods.

Satavahana fortification

That the Northern parts of Karnataka had come under the control of Satavahanas is evident from the fact that Satavahana coins have been discovered at Wadagaon Madhavapura, Banavasi, Sannathi, Harangeri, Aihole. Their inscriptions have been found at Banavasi, Vasana, and Sannathi etc. They held the administration of the Deccan for about four centuries (BC first century – AD Third century). Pratishthana (Paithan in Maharashtra) was the capital of their Empire.

The Satavahanas rose to power in South India and extended their empire, which included present Andhra Pradesh, Karnataka, and Maharashtra up to Vindhyas in the north. During Satavahana rule, Karnataka witnessed the growth of forts and fortifications in and around their territories for the first time. *Pliny*⁴ mentions of an eastern Deccan possessing thirty walled cities with huge army, social, urban life of India and their trade activities. Ancient Karnataka had many trading centres, and small exchange centers. The large markets were in towns. An inscription found at Vasana, (a village on the borders of Naragunda taluk Gadag district) in Prakrit language, which belongs to the period of Vasistiputra Sri Pulomayi, refers to the construction of a Shiva temple by Chandra, a devotee of Shiva. The Excavations at Wadagaon Madavapur, in Belgaum district, reveals

⁴ Basham. A.L (2004), The Wonder That Was India, Pan Macmillan, London. P-232

that it was a centre of trade and commerce during Satavahana period.⁵ However, we do not find any inscription mentioning of fort construction in Karnataka. There were many centres where Semi- precious stones were sold. Also South India provided spices, gold, precious stones and pearls, together with sandalwood and ebony⁶ as exports goods. Buddhist sources refer to long distance routes being regularly frequented, from Shravsti to Pratishtana.⁷ The most exciting discovery of Satavahana rule is the site of Sannati in Gulbarga district, situated on the left bank of the river Bhima. Sannati has three important ancient sites, two of them were habitation sites and the third a stupa site. The habitation sites have been completely damaged by constant ploughing for centuries. However, they are replete with antiquities, such as terracotta⁸s and beads. One of the sites has a fortification along the river bank. The fort is constructed with large sized bricks typical of the Satavahanas periods. Even a large number of Satavahana antiquities have been found in Banavasi; including coins and an inscription of Vasishiputra Sri Pulumayi⁹. But even this inscription does not indicate any political significance over the area. But considering the political activities of the Satavahanas in the area around Banavasi, it becomes clear that Banavasi was included in the Satavahana kingdom. In Karnataka Madhavapura near Belgaum District which was first discovered by Panchamukhi R. S. traces few of the

⁵ Jeelani S.A (2006) Biapur District (Bagalokot District Included) Gazetteer, The Government of Karnataka, Bangalore. p-54

⁶ Thapar Romila: Early India (2002), Penguin Books India Pvt. Ltd, New Delhi. P-235

⁷ Ibid; p235-236

⁸ Seshadri. M.: (1968), Buddhist Monuments of Sannati: QJMS, Vol. LVI, Mythic Society, Bangalore. Pp-36-37

⁹ This inscription was edited by A.V Narasimha Murty and H.R Raghunatha Bhat in Studies in Indian Epigraphy , Vol.I, PP-34-39

fortification walls of Satavahana period have been found. A. Sundara in his work¹⁰ has done a detail study on Madavapura of Satavahana period.

Kadambas- Karnataka's first Kannada Dynasty were the Kadambas. They ruled Karnataka between 325 – 590 AD. Mayurasarma was the founder of this dynasty, who made Banavasi, or Vijaynti his capital, Banavasi is also known as Banavase and Banaavashi and is situated in Sirsi taluk of Uttara Kannada district of Karnataka. The whole of Banavasi area is an ancient site of religious importance. This strategically is located and the acute circular bend of the river Varada, made it a naturally important city with a fortified wall around it. But today the fort walls are in ruined state. Banavasi is bound on all sides by the villages namely Bhashi, Linganamatti, Narur, Hallikoppa, Thigani, Kadagod and Ajarani.¹¹ The village itself is small and can be divided as village, *Kote* and *Pete*.¹² It is surrounded by cultivated lands on the northern, southern and western sides. The whole region has a thick mantle of evergreen forest grown on the thick soil, with stone not easily available mud is used extensively. Bricks have been used partially for the purpose of increasing the strength. The Fort is built on the left bank of the river Varada, where the river flows in a zig zag way thus providing considerable protection on the southern side. The fort is in an oval shape which includes the moat, gateways, etc. Many parts of the fort wall, appear to have reconstructed and renovated under Chutus, early Satavahanas, early Kadambas and later Kadambas. The advantage in having the fort next to river was that the water could be taken directly from the river to the surrounding moat.

¹⁰Sundara. A. (1981): "A Two Thousand years old town and its Architecture in Vadgaon Madhavapura (Belgaum) in Karnataka", in -Sri M.N Deshpande Felicitation Volume. Festschrift. (Ed) by M.S.Nagaraja Rao)..Agam Kala Prakashan, Delhi.

¹¹Narasimha Murthy A.V. (1997):Excavations at Banavasi, Directorate of Archaeology and Museums, Mysore.P-1

¹²Ibid p-2

Now tracing the fortification in and around Badami or in Bagalkote district we don't find any fortification of Satavahana period, Their empire was extended from western coast up to river Malaprabha, but it is very difficult to say whether they ruled over Badami or today's Bagalkote District. But in the neighboring district of Belgaum we have Jain Basadi built by Mrugeshvarma and at Halasi with inscriptional evidence and we have found two armed Narashima and Ganapathi made of mud. Even in Pattadakal is found an idol of a Tirtankara Moorthi. We have evidence that, few monuments belong to Kadamba dynasty is found at Aihole, Pattadakal. At Pattadakal in front of Sangameshwara temple and left of Jaina Narayana Gudi we can find pre Chalukyan ruined two Brick temples, and same way we can find at Aihole, Ambigara Gudi and Sangameshwara temple at Pattadakal. Even Kadambas have fortified wall in their capital and other cities like, Vijjanti (Banavasi) Pulasika (Halsi in Belgaum District) and Uchhasringi in Bellary District.

After the decline of the kadambas, the Chalukyas of Badami occupied the area and Banavasi became one of their provinces. They appointed their feudatories to administer the Banavasi area. Chalukyan king Vinayaditya's daughter Kunkuma Mahadevi was married to Alupa prince Chitavahana and he was appointed as the governor of Banavasi.¹³

¹³ Dikshit. D.P. (1980) :Political: History of the Chalukyas of Badami, Abhinav Publication, New Delhi, P -157

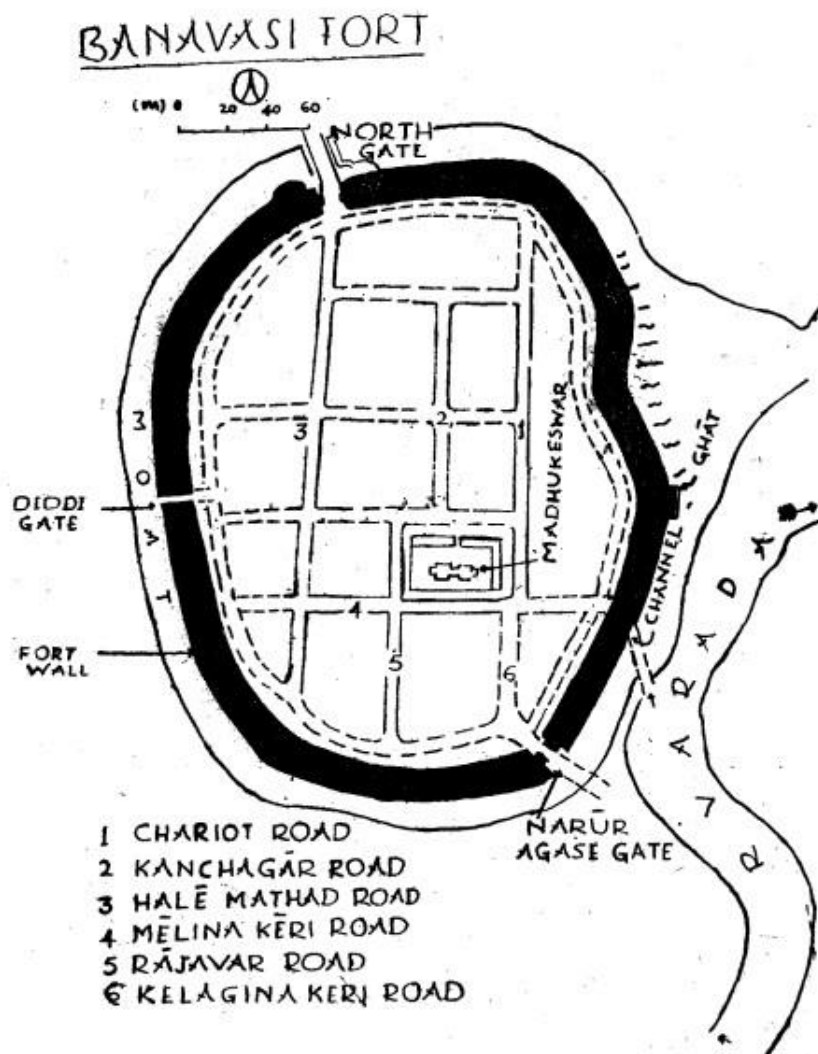


FIG. 8

Fig. 2.2. Banavasi fort: (courtesy: S. K Joshi: Defence Architecture in Early Karnataka)

Gangas of Talkad - The Gangas ruled as sovereign dynasty in Gangavadi, the region of the present Kolar, Myosre, Bangalore, Mandya, Ramanagara and Tumkur districts, from 350 to 550 A.D. They continued to rule as the subordinates of the Chalukyas of Badami, and

later of the Rashtrakutas, till the end of 10th century. Initially they were ruling from Kolar and later shifted to Talakadu. Manne in Nelmangala taluk in Bangalore district was also their capital for some time. Inscriptions are the chief source of information about the dynasty. Their territory extended from Ujjain in North to Rameshwaram in South. But temples of the Ganga times speak of talented Stapati or architects, sculptors and stone quarriers. Kolar, Talakadu, Mankund, Manne, Begur near Bangalore, Nagawara, Narsamangala, Kirtipura (Kittur in Mysore district) Nandi, Shravanabelagola, Hebbur, Kudalur etc, were flourishing commercial centres. Merchants and craftsmen had their guilds.¹⁴ There were village and town assemblies. Pittangere had 12 Praja Bavundas in about 500 A.D., who were the elderly peasants. Talakadu had an Assembly of 25, Parur of 72 and Gattavadi 70. Agraharaas had assemblies of the Mahajanas. There were Talavara or watchman in every village. Major cities like Talakadu had an official called Pattnaswami, who looked after the village, maintained roads and choultries. Guilds of potters, bamboo workers, oil mongers and people of other professions were also functioning. The State maintained a standing army and there was also feudal tax. Gajasahani or commanders of the elephant corps and Thuragasahani or Ashvadyaksha, head of the cavalry find a mention.¹⁵ The best example of Ganga fort is near Bangalore at a place called Begur. It's a mud fort. Because of rain and natural calamities, there is no proper protection for this fort now and as such it is in ruins. There are gateways in eastern direction and near both the gateways are found mud Bastions. The fort is in circular shape. Totally there are 12 Bastion. The fort is spread over 3 acres of land. Moat around the fort is of 15 feet width

¹⁴ Suryanath. U. Kamath (2001): A Concise History of Karnataka, Jupiter Books, MCC Publications, Bangalore. - P-49

¹⁵ Ibid; P -48

and 10 feet in depth.¹⁶ This fort has two ancient temples dedicated to lord Venugopla and Ishwara. However there are no traces of forts in other places as there is no evidence of remains of any fort.¹⁷

Chalukyas of Badami

Badami Chalukyas ruled over Karnataka and successfully directed the politics of South India from A.D 540 to 757 AD. Their cultural contribution to the history of Karnataka is immense. They were the first dynasty that united Karnataka under single rule. They ruled over an extensive region that extended from the Cauveri to the Narmada, and held sway over, large parts of modern states of Karnataka, Maharashtra, Goa and parts of Gujarat, Madhyapradesh, Odisha, Andhra Pradesh, Telangana, and parts of Tamil Nadu. Chalukyan army had earned the name and fame as „Karnataka balam Ajeyam“. Their military encounter with Harshavardhana of Kannauj, and his defeat in the hand of Pulakeshi II taking the tittle „Dakshinapatheswara“ is well known. Chinese traveler Hiuen –Tsiang and Arab historian Tabari have throw some light about the dynasty. They say that Chalukayan army had elephants, cavalry, and infantry and speak of hundreds of elephants in army. These animals were intoxicated with liquor before being sent for war. The Chalukyas also had a strong navy. It was with the help of a strong fleet that Mangalesha could reduce Revatidwipa and Pulakeshin II could take Puri in Odisha. Reference to Vijayaskandhavaras of military camps is found in many records.

¹⁶ Sumkum Govardhan (2012): Kannada Nadina Pramuka Koegalu, Odu Baraha Balaga, Bangalore. P-27

¹⁷ Devarakonda Reddy : personal interaction on 28/9/2014, Bangalore

The mighty army of the Chalukyas was famous as „Karnatabala“ and is praised as invincible. The country was divided into Maharashtrakas or great provinces, and they were again divided into Rashtrakas, also known as Mandalas. Vishayas or a district was the next unit; Bhoga was smallest unit which was a group of villages. Members of the royal family were appointed as governors over imperial provinces, including women like Vijayanka and Lokamahadevi.

Badami, their capital, situated in Bagalkote district is blessed with spectacular natural scenery in the Deccan. It possesses the most interesting architectural remains within the confines of the old Chalukyan territories. Badami is located in a deep wide steep gorge amidst vast mighty red sandstone hill range the Kaladgi series. In the wide valley is a natural pond called Agastya Tirta. Ptolemy in 150 AD refers to Badami, Aihole and Pattadakal as places of commercial importance. Thus religiously, economically and also from strategic point of view Badami had qualified itself to become the capital of a kingdom. Puikeshi I had realized fully well all these aspects and therefore, must have made it as the capital and built a fort.

There are two natural hills - Northern hill and Southern hill called as Bhavana Bande and Ranamandala respectively. The north hill forms a natural watch tower. The top of the hill is intensively flat and hence is not easily accessible. There are many narrow deep natural passages with steep sides of rock. There are many zig-zags and any one who is unfamiliar with the topography of the hill would easily get lost or confused. Pulakeshi I was very clever in selecting this hill top for erecting the fort, as it is mentioned in cliff

inscription¹⁸ about the construction of fort which as an unconquerable fortress from the top as well as bottom. A fort wall has been raised along the edge of the flat surface of the high hill. Therefore the plan of the fort is irregularly polygonal. There are five entrances for this fort.

Early Bastions of Pulakeshi period are square and rectangle in shape. As it is a Giridurga and comparatively less in height. Outer fort appears to be circular in shape but it's naturally built around the northern hill it's a cluster of big boulders. It has gaps or crevices between stone joints which are filled by rubble packing. The stones are arranged on the edges making two faces leaving a hollow portion inside, filled with core of earth and rubble. Another structure which draws our attention is the use of large and medium sized blocks of red sand stone in the lower course of the wall and smaller ones in the upper courses.

The fort on the north hill has under gone renovation and reconstruction. There are lots of changes which can be observed. Fort wall on the western side next to circular Tipu's bastion, towards left, in the same fort wall with loop holes in the fort wall with small gap in between. The western parapet wall differs in design; it has been skillfully filled with minimum fortification with maximum utilization of natural resources. Within the fort area are several remains of ruined buildings, temples, fallen pieces of sculptures, Tank and natural pond. A Dargah belonging to a later period can also be seen here. As it's a Giridurga we don't find Moat around the fort. This fort has been built on the edge of the hill. As we move further toward the entrance V. We find three Circular Barrel-like

¹⁸ EI. Vol no XXVII, PP-4-9

structures; these are believed to be the granary, According to U.S Moorthy these granaries are of later period. The interior of these granaries are deeper form the ground level outside, with strong circular stone foundation. ¹⁹

According to the survey undertaken, the entire fortificatin length is about nearly 1 K.M (937 meters) and the thickness of the wall is 1.20 meters. There are artificially built tank on northern part of fort and 3 small ponds, its cluster of boulders, to move above these boulders they have connected these boulders with stone slabs. Thus Badami alone as even today we can find two slabs.

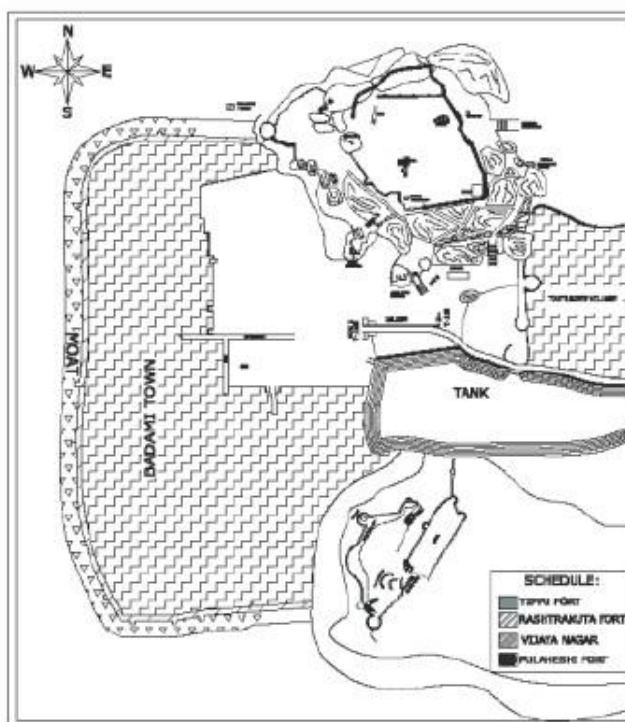


Fig. 2.3 : Four Fortification at Badami

¹⁹ U.S Moorthi : personal interview at 3 days International workshop on Material culture, 11-13 April 2014, calibration with University of Exeter and NIAS, Bangalore, Jain University, at workshop on Material culture. Bangalore

Badami alone has four forts of different period

1. Pulakeshi fort of 6th century
2. Rastrakuta fort of 10 century
3. Vijayanagar fort of 14 century
4. Tipu fort of 18 century

Other than Badami we find Badami Chalukyan forts at Aihole, Pattadakal, Alampur, Huli, Incala, and Halasi.

Halasi: It is situated in Kanapur taluk of Belguam district. Ancient Palasika or Halasi is mentioned in Kadamba king Mrugeshaverma's copper plate inscription Halasi was under their control (500 A.D.). We can trace the mud fort in ruin state. A. Sudara has traced that there must be a Palace area near the mound of soil nearby. Later this place was occupied by Pulakeshi-I. Later on it was under Chalukyan Administration. To the west of Halasi we find a place called „Rama Teerta“ where we find Rama temple surrounding this temple. We find fort stone remains here and there. According to S.K Joshi this fort must have been renovated during Chalukyan Period.

Huli: Huli is a small village in Saudatti taluk of Belguam district. We find a huge lake towards north. We also find ancient hill fort in ruin state. On architectural basis, we can trace that, it belongs to Chalukyan period probably and it was an administrative centre. There are many Chalukyan temples nearby Huli Lake. Later these temples were developed

by Kalyani Chalukyas. In 1674, again this Huli fort was renovated during Chatrapati Shivaji time.²⁰

Inchala: Inchala is in Belgaum district. We find early Chalukayan temples here. To protect these temples we find a civilian fort around temples which have been renovated.²¹ Aihole, Badami, Mahakuta, and Alampur forts have been discussed in length in 3rd and 4th chapter along with diagram and line drawings based on actual measurements, supplemented by Photographs.

The Chalukyan devotion to the religious art and architecture is great Because of that we find hundreds of temples built by them at Aihole, Badami, Pattadakal and Mahakoota. Around the temple and the whole habitation we find a fort. By the middle of 8th century the power of Chalukyas declined. By the middle of 8th Century the Power of Chalukyas went into the hands of Dantidurga of Rastrakutas dynasty.

The Rastrakutas

From 757 AD for almost two and a quarter centuries, the Rastrakutas directed the destinies of the political and cultural life of the people of the Deccan. The Rastrakutas established their capital initially at Pratishtanapura (Paithan in Maharashtra). Later Manyaketa or Malkhed which is situated in Chitapur Taluk at Gulbarga District in Karnataka became the capital. . The rulers were very enlightened and noteworthy. Among them are Amoghavarsha-I, Dhurva, Govinda III, Indra, Krishna III. They were genius in civil architecture.

²⁰ Suryanath Kamat (1978): Belgaum District Gazetteer, The Government of Karnataka, Bangalore, P-239

²¹ Ibid;



Fig. 2.4 : Bastions of Entrance-I of Malkhed, Gulbarga District



Fig. 2.5 : Bastions of Entrance-II of Malkhed, Gulbarga District

We find a fort on the left bank of the river Kagina. The craftsman and engineers were not only famous for building fort and fortification but also were well versed in carving out the monolithic shrines at Ellora and the caves at Elephanta. Their period also witnessed a steady increase in the construction of temples and Basadis. Many of the rulers

were active patrons of literature, art and architecture. Under them fine arts like dancing and painting also furnished. As Malkhed is located in peninsula and is surrounded by waters on three sides, it has considerably a natural defensive character. Probably this made the rulers to select it for their capital. Malkhed was subjected to a series of unspeakable destructions by the Cholas and later by the Muslims during the Sultanate and Moghul periods. The fort is built in the area closely surrounded by the rivulet on the east and south of the Kagina River on western side.

Naturally the river plays an important role in defensive mechanism from western, southern and the eastern side. The moat fulfills the need on the remaining part. The outer fort is irregularly polygonal in shape. The plan is semicircular with many rectangular bastions. Around outer walls there are around 39 Bastions, the wall is 3 meters and the wall rises to a height of 5 to 6 meters height near Bastions. But major portion wall is in ruins. During the rule of Mohammad I of Bahamanis, the fort must have been built with considerable modification by renovating the earlier fort. Within the fort we find Jumma Masjid and Kali Masjid. We can also find a peculiar structure inside. It's just like bottle in Shape, wide at bottom and very narrow upwards.



Fig. 2.6 : Ruins of Malkhed Fort



Fig. 2.6 : Broken Hindu Gods and Satigal Sculptures

The top of the fort at the exterior edge is provided with many battement typical of Indo-Islamic style. The main entrance looking east wards has two bastions at the front and two in the middle, narrowing the space of entry. Further we have entrance I, II and III, later passage leads to two streets one leading to Juma Masjid and another path leads to Kali-Masjid.



Fig. 2.7 : Neglected Cannons within the Malked Fort

The Rastrakutas fort of Malkhed consists of the complex, the palace area, mansion the temple, broken Hindu god's sculpture, and few cannons of medieval period, which are not at all maintained. The Rastrakutas Empire came to an end in 973 AD during the rule of King Karka-II. The next powerful rulers of Karnataka were called Later Chalukyas.

Chalukyas of Kalyana -The imperial traditions initiated by the Chalukyas of Badami in Karnataka were continued by Chalukyas of Kalyana. This period of the Chalukyas of Kalyana was a period of cultural efflorescence. Tailapa- I was the first ruler who recaptured their lost power from the hands of Rastrakutas. Their capital at Kalyana (now known as Basavakalyana in Bidar District) is a doab region between Krishna and Tungabhadra River. They have also built forts at Morkhid, Kalyana, Mangalavada (now in Maharashtra), and Lakkundi.

The fort of Kalyana Chalukya was modified from time to time. Kalyana was very prominent city from 10 century to 13 century (975-1290 A.D.). It played a politically important role in the history of medieval Deccan. They contributed original fort layout and major fortification activities using Hindu pattern. Later period with external incursions these witnessed a substantial alterations and modifications with Islamic style. Later Kalyana remained as the capital of the Kalachuris. With the invasion of Malik-Kafur in 1310A.D. It went into the hands of Muslims. Kalyana remained a small headquarter of Muslim feudatories of the Tughlaks, the Barid Shahis, the Mughals, the Marathas and the Nizams of Hyderabad.

This fort is not clearly visible from the ground level, but only from a distance of one and a half kilometers away. The fort is located at the lowest level in relation to the

surrounding area. This area has been very carefully selected, for it is not easily visible from distance. Fort of Kalyana consists of three concentric irregular fort-walls constructed and reconstructed in different periods. Inner most was of the Sultanate of Munhall period; and the outermost was probably of the later part of post Mughal period. The fort is almost oval in plan, which includes twelve circular bastions at regular intervals and some bastions are at unequal distances. Special features here are that bastions have only a parapet wall, and at the top of the bastions, in the centre place is a metal gun on the pivot. On the exterior side of the fort-walls is a moat of 30 m and 10mt deep. We find guard room from entrance I to entrance VI. Here we find a wooden door armoured with iron spikes for the entrance III. Other than this we find, magazines, pillared guardrooms, seven entrances, and Palace complex also known as Raj- Mahal.

Hoysalas of Dwarasamudra

The Hoysala dynasty ruled over Karnataka with Belur and Halebidu as their capital. They ruled from 11 century to 14th Century A.D. The important rulers were Vinayaditya, the Ballala-I, Vishnuvardhana, Narashima-I, Ballala-II, Narasimha- II and Ballala-III. Very few forts belong to their dynasty.

We can mention about Halebidu fort which is in ruin state. It is situated in Belur Taluk of Hassan District. This fort consists of few surrounding villages like Bennegudda, Doorasamudra etc. Because of negligence today very few parts of fort can be seen here and there. The fort has been built with Black stone. Within the fort premises we have

Hoysaleswara temple, Kedareshwara temple, Jaina Basadis, Veerabadra Temple, Panchalingeshwara Temples and Nageshwara temple.

Vijayanagara Kingdom -Vijayanagar Empire was founded by Hari Hara & Bukkaraya in 1336 AD, under the able guidance of Sri Vidyaranya. Major parts of South India were ruled by them. Empire was very strong in its army wing like infantry, cavalry and elephantry, Vijayanagar ruler's contribution in the form of Art, Dance, Music, Architecture, and Literature is great. They were equally good in religious and civil architecture. Vidyaranya directed the building of a city near Pampa- Kshetra and called it as 'Vidyanagara in honor of the sage. As Hampi is located in a most rugged and hilly areas on the right bank of the Tungabhadra, at a strategic place. Taking into consideration of this suitable place of hills and valleys, it was effortlessly defensive in nature.



Fig. 2.8 : Gateway of Hampi Fort, Hampi

Source: www.millionlittlestiches.blogspot

Filling gaps in between the huge rocks and hillocks which spread almost around the entire environs of Vijayanagara city were bridged with solid mass of stone walls that served as a framework of the impregnable defence wall system. The hills around Hampi are of granite of brown and grey to rich golden brown colors or red mixed brown. They have huge rocks and boulders weighing hundreds of tons. Fort references have been made by many foreign travelers or visitors like Nicolo-conti, Abdul Razak, Duarte Barbosa, and Nuniz. They refer about the fort, fort walls, gateways etc. There are many gateways to Vijayanagar like Kampli gateway, Sundur gateway, Hospet gateway, Kamalpura gateway, Mallapura gateway; Citadel area today is completely extant. Only some parts of this fort are now extant near kamalapuram and Kadirampuram. The fort plan is roughly oval shape which is extended towards east and west side. The thickness of the wall is about 6 m which is very thick. The core of the wall is made up of mud and pebbles. Special feature of Vijayanagar walls is that, high walls have built around important buildings, like mansion, private royal buildings like Ranga Mahal etc. There are huge gates around fort in different direction like Penugonda gate, domed gate, Bhima gate, Dakhani gate which is southern part of fort. The Talar Ghatta Gate, and Pan-Supari gate. Other Civil architectural monuments like defence wall, watch towers, canal, fort, fortification, tank etc. and even structural temples can be seen all over South India. But after Talikote Battle in 1565, the last rulers Tirumala and Venkata went to Penugonda in Andhra Pradesh along with huge wealth. They left behind glorian city Hampi unattended which was burnt and destroyed.

The Adil Shahis of Bijapur (1490-1686) - Due to internal disputes the Bahamani's divided into 5 groups. Among them Yusuf Adil Shah, ruled from 1490-1510, made Bijapur

as centre for all his activities. They were contemporary rivals of Vijaynagar Empire. As Vijayanagar rulers were well advance in arms and armory Adil Shahis built one of the strongest forts in South India. It is almost in circular or semicircular shape. The whole fort diameter is more than 10 km. The height of the fort is about 20 feet. There are 5 gateways to this fort around it is a moat which is very deep. The fort has semi circular bastions, numbering 60 on the exterior at regular intervals. The fort wall including the bastions is made of ashlar masonry. Burj meaning Bastion or watch towers in Persian language are also found at regular intervals. To the north, there are main six gateways:

1. Macca Gate
2. Shahapur Gate
3. Bahamani Gate
4. Allapur Gate
5. Fateh Gate and
6. Diddi Gate.



Fig. 2.9 : Parts of Bijapur Fort Wall

Source: www.tripadvisor.in



Fig. 2.10 : Gateway at Bijapur

Source: www.panaromio.com

Each gate has distinctive features. They are internally connected to centre of the city by roads. In addition to these gates, essentially protective devices, there are three bastions, namely, 1. Malik-e Maidan gun Bastion. 2. Ali Burj and 3. Landa Quasab gun bastion.

Devanahalli fort -Devanahalli belongs to Bangalore rural district. It was under Palyagara from 16th century to 18th century. Later Hyder Ali captured Devanahalli and merged it with Mysore. The fort is in oval shape, there are 13 Bastions in circular shape. This fort is similar to southern fort of Badami. Field work done here at Devanahalli, helped to understand the patterns of Tipu's time, Bastion, loophole, majority of architectural features are similar to Badami fort of Tipu.



Fig. 2.11 : Devanahalli Fort Entrance

Source: www.tripadvisor.in



Fig. 2.12 : Circular Bastion with Parapat wall of Devanahalli Fort

Source: www.flickr.com

Manjarabad Fort-Manjabad fort is a „vanadurga“ surrounded by forest and beautiful landscape the fort is situated in Sakleshpura Taluk, Hassan District. The special feature of this fort is that it is in star shape. It is the only fort in star shape in Karnataka. Tipu Sultan

built this fort in 1792. This fort has been built by using stone on top and they have also used Brick and cement (gare). The Gateways and entrance have beautiful arches and columns. Here also we find underground Magazine to store Arms and ammunition and around fort we find Moat. Since it is surrounded by forest it is very difficult to access.



Fig. 2.13 : Satellite picture of Manjirabad Fort

Source: www.googleearth.com



Fig. 2.14 : Interior of Manjirabad Fort, Sakleshpur

Source: www.holidayiq.com

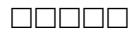
Thus from the time of Mauryas to Tipu that is from 3rd century to the 18th Century

AD almost a period of two thousand years witnessed the rise and fall of many dynasties.

All the capitals and the sub capitals of dynasties are located in various districts of

Karnataka. Effort in this chapter was to trace the growth of defence mechanism in

Karnataka under various dynasties.



HISTORICITY OF BADAMI

Karnataka is a southern State of India, located in the fertile Deccan Plateau. Bagalkote newly carved out district, is situated in the northern part of Karnataka. It evolved during the Cretaceous-Aeocene Age (approximately 6-7 million years ago.) Though the fertile region has river Krishna and its tributaries, flowing along multitude of valleys, the insufficient irrigational facilities in the interiors renders large parts of the district drought prone. This district was home of the imperial Chalukyas of Badami. Aihole, with its innumerable numbers of temples earned the name as “Cradle of Hindu Temple architecture”¹ and Pattadakal has a confluence of different temple styles, and is internationally renowned and recognized by UNESCO in 1987 as a World heritage site². This district has many pilgrim centers such as Mahakuta, Banashankari, Kudala Sangama, and Shivayogi Mandira near Badami. Sharanas like Konduguli Kesiraja and Devura Dasimayya besides Basaveswara, Madivala Machideva, Nuliya Chandayya, Bavura Bomayya, Havinala Kallayya, Maggeya Mayideva, Chennabasavanna, Gangambike, Neelambike, Mukhtayakka, Guddavve etc, had this region as their centre of activity.

Commencing from the Palaeolithic ages to the present times, the district has witnessed a rich and a unique cultural development. Hundreds of pre-historic settlements have been discovered at the Malaprabha, Ghataprabha river-beds of the district. Evidently the geographical conditions of the district were favorable for the settlements of Stone Age man. In several of the places of the district are stories and

¹ Brown Percy (1930): Indian Architecture (Buddhist & Hindu), by D.B. Taraporevala Sons and Co. Pvt. Ltd. Warli, Bombay. P-54.

² Biswas Sachindra Sekhar (1999): Protecting the Cultural Heritage, Aryan Books International, New Delhi. P-87

incidents associated with Ramayana and Mahabharatha. Several *sthalapuranas* associated with the epics are popular in the region.

It is generally believed that the district had come under the administrative control of the Nandas, Mauryas, Satavahanas and Kadambas. But in its real sense, history of the district begins with the Chalukyas of Badami. The cultural contributions of the Chalukyas of Badami, who pioneered the history of the district, are immense. On the fall of the early Chalukyas, Badami fell in the hands of Rashtrakuta, Chalukyas of Kalyana, Kalachuris and later the Seunas Khilji and Toghalak invasions and the fall of Seunas, the Hoysalas, the Kakatiyas, the Pandyas created a political vacuum which paved the way for emergence of Vijayanagara and later the Bahmanis in 1347. The fertile land of the Malaprabha region, the steep and lengthy Kalathgiri hill range providing the natural protection seemingly attracted several powers. On the other hand, the present Raichur District located close to the region also witnessed powers vying for establishing control over it. The Raichur Doab became a bone of contention between Vijayanagara and Bahmanis and several battles were fought between the two.

The north of Krishna River remained under Bahamani Empire. While the southern part that of the Bagalkot region was in the hands of Vijayanagar, the Bagalkot region it was Badami over which Vijayanagara held sway. Harihara-I Vijayanagara rulers chose Badami to build a fort because it was the northern border of Vijayanagara Empire. Later Bijapur and Bagalakote districts came under the political influence of the Mughals, the Marathas, the Peshwas, Hyder and Tipu. During Tipu's period a very strong fort was built on southern hill known as Ranamandala hill. He renovated the old fort and built a bastion on the Northern hill. Later Badami and surrounding areas came

under British administration, and were placed under Bombay presidency while provinces like Jamkhandi and Mudhol were under the local chieftains.

SOURCES

For a study of the history of Bagalkote, available are a rich and varied source material. Hundreds of sites pertaining to Stone Age Culture have been reported, In respect of Anagavadi, a Paleolithic site, survey and excavation has been completed. Similarly, much information on other sites relating to the remaining cultures is also available.

In writing the history of the district, inscriptions are the main source, which are available in very large numbers. The earliest inscriptions are of the early Chalukyas and the latest of the 18th Century. Local officers under the Chalukyas of Badami, Rastrakutas, Chalukyas of Kalyana, Kalachuris, Seunas, Vijayanagara, Bahmani, Adilshahi and Tippu issued the inscriptions. Majority of the inscriptions are related to land grants. With the help of these inscriptions the political, social, economic, religious and cultural aspects of the district may be understood. Eighty percent of the reported inscriptions from the district have been published in South Indian Inscription volumes 11, 15, 18 and 20. Based on these an index of district wise inscriptions is published³. Moreover, Persian and Arabic inscriptions of the district are published in Epigraphia Indo Muslamica volumes.

The river Bhima is referred to not only in Matsya, Brahma, and Vayu Puranas, but also in Mahabharatha. Puranic references speak of Bheemarathi River being born

³ Rajendrappa: (Ed) Jeelani S.A. (2006): Biapur District (Bagalokot District Included) Gazetteer, The Government of Karnataka, Bangalore, P-38.

from the sweat of the brow of Lord Shiva himself as desired by King Bheemaka of Ayodhya. The river is supposed to be having sacred powers, and Yeduru is believed to be a sacred place where Daksha Brahma performed a Yajna and Goddess Parvathi, performed penance. The villagers show the mound of ashes in an area spread over nearly 13 acres of land, as the place of the yajna. But the remnants of this mound of ashes belong to the Neolithic culture. On the other side of the river is another place also known as the place of yajna⁴, performed by Daksha Brahma, this is Malaprabha also known as Malapahari and is believed to be a sacred river and remover of the sins of mankind.

Kalleswara temple at Hippargi in Sindagi taluk is stated to have been built by Jamadagni, whose father was Parasurama. Parasurama, who hated the Kshatriyas circumambulated the world 12 times, killed all the Kshatriyas he met and on his return journey dipped his blood stained axe in river Malaprabha, at its course, near Aihole. Consequently all the river water turned red. People who saw the red water are said to have shouted⁵. In course of time that became Ayyavole and later Aihole.

Nandavadagi in Hunugund taluk is locally opined to be the capital of the Nandas. While Rama was in Vanvaas, it is said that he had come to this part of the country. Mahakuta, Aihole, Badami, Bagalkot, Galagali, Hippargi localities formed a part of Dandakaranya. Shivalingas found in Kundargi and Galagali are stated to have been installed by Lord Rama. Sitimani is opined to be the human habitation from the days of Ramayana, and worshippers of Sita are found here. During his sojourn in the forest, Lord Rama is said to have resided here. The footprints in front of the temple,

⁴Ibid. P-40.

⁵Rajendrappa: (Ed) Jeelani S.A. (2006): Biapur District (Bagalokot District Included) Gazetteer, The Government of Karnataka, Bangalore, PP-40-41.

atop the hill nearby, are found an inscription of 15th century which says „Lord Ramanatha“s lotus feet“. Around the villages, Rampura, Jadaramakunte, Bilikerur, Beerakhabbi, which are beyond the *Sitimani*⁶ hillock, stories of Ramayana are prevalent. Bagalkot village is said to be the land granted to the music troupe of Ravana, the Lord of Lanka.

The Mahakuteshwara purana speaks of Badami is associated with a popular epic story of the demon brothers, Ilvala- Vatapi. The demon brothers are said to have lived in Vatapi, located south of the mountain Vindhyas. Ilvala desired a son equal to God Indra. But, the Brahmins refused to grant him the desire. Therefore, the demons hated the Brahmins, and pretended to honour those Brahmins, who came to them, as guests. Vatapi, the eldest of them, would turn into a ram and become food for the guests. After the guests had partaken their food, Ilvala would call Vatapi to come out, and Vatapi, now in the form of food in the stomachs of the guests, would come out slitting their stomachs. Once they were visited by sage Agastya. Unaware of the powers of Agastya, who had come from the north, these brothers, with their evil ideas, planned to kill Agastya. But, Agastya, by virtue of his divine powers, had understood that. He had taken the food offered by Ilvala, and uttered „Vatapi Jeernobhava“ whereby he digested Vatapi and, thus he put an end to the evil brothers⁷. Dejected by this, Ilvala sought the help of the saint and begged for moksha. Accordingly, Ilvala became a hillock near Aihole and Vatapi became another hillock near Badami. In memory of Agastya, to this day there is a pond in Badami, Known as Agastya Tirtha or Agastya pond.

⁶ Pattar Sheelakanth (2000): Badami Samskruthi Adhyana, Prasara, Kannada University, Vidayaranya, Hampi. P-10.

⁷ Jeelani S.A. (2006): Biapur District (Bagalokot District Included) Gazetteer, The Government of Karnataka, Bangalore, P-42.

According to the sthalapurana of Mahakuta, Lord Vishnu who had killed Simhasura, the demon, disappeared in the Pushkarini at Mahakuta. Since then the pond came to be known as Vishnu Pushkarini. Monkey faced daughter of Devidasa, Lord of Kasi, got liberated after a holy dip in this Pushkarini. Because of this, the Lord of Kasi is stated to have built the Mahakuteswara, Mudhi Mallikarjuna and Virupaksha temples.

Bagalkote district is made fertile with Malaprabha, Krishna, and Ghataprabha. And the District was endowed with all the natural resources necessary for the activities of the primitive man. Kaladgi and Bheema rock cliffs in the district had the required quartzite, chert, and chalcidony rock layers, essential for the primitive man to make his stone implements. The fertile land around river Krishna and its tributaries, Malaprabha, and Ghataprabha, had been home to many settlements of the Stone Age man. The fact that primitive man preferred to live on the river bank and valleys is seen from the sites excavated in north Karnataka. British Geologist, A Bruce Foote, renowned as the “Father of Archaeology”, had for the first time in 1888 reported about the prehistoric findings in Khyad and Dhanakasirur of Badami taluk in the region of Malaprabha. He had found stone implements of the first stage of the Old Stone Age culture dating back to about two lakhs years and has laid the foundation for the study of the pre history of the districts. Later in 1946 Zaneer FE also carried out excavations at Khyad in Badami Taluk and Menasagi in Ron Taluk.

Further, Sankalia, H.D., Joshi R.V., and Sundara. A., Narayana Babu P., Pushpa R.S., Dev S.B., Paddaiah, Rajguru S.S., Banerjee, K.P., Narasimhaiah B. Kori Setters and others have surveyed the river valleys of Malaprabha, Ghataprabha, Krishna,

⁸ Sundara. A: (1960-61) *Charcolithic and Prehistory of South India*, Indian Archeological Report, P-56.

Bheema and Doni and have brought to light hundreds of settlements of archeological interest. Besides, the scholars mentioned above others like Deshpande M.S., Seshadri, M., Padiger S.V. have also thrown light on the district. Their writings have succeeded in taking the Archaeology of the district back to about five lakh years.

Early Stone Age Culture (Crica 5,00,000 to 2,00,000 B.C.)

The area around the five rivers in the Bijapur District served as the home for the activities of the Old Stone Age man. Implements belonging to the Early Stone Age are found in a number of places in the vicinity of river Krishna and its tributaries Ghataprabha and Malaprabha. Places around the river Malaprabha have the remains of Early Stone Age settlements. Important sites of the region -

1. River Ghataprbha: Anagavadi Honnihalli, Edahalli Kovalli, Sindagi, Asangi, Padasalgi, Bagalkot, etc are Old Stone Age sites.
2. River Krishna: Kolhara, Beerakabbi, Sangama, Alamatti, Sitimani, yalaguru etc
3. River Malaprabha: Khyad, Dhanakasirur, Badami, Nandikeswara, Sivayogimandira, Pattadakal, Aihole, Benakanavadi, Nimbalagundi, Hale Kadivala, Hiremagi, Chikkamagi, Colachagudda, Thammihala etc

In Khyad on the banks of Malaprabha, and Anagavadi on the banks of Ghataprabha various types of hand-axes, cleavers, burins, choppers, scrapers etc, made of red quartzite are extensively found in khyad. Similarly in Dhanakasirur, Pattadakal, Nandikeswara and Aihole, also these implements are found in good numbers.

Middle Stone Age Culture (circa 1, 00,000-40,000 years)

The sites already identified in 1954 by Sankalia, as belonging to Middle Stone Age in Maharashtra and other areas, was also identified by Sundara in 1957 at Salavadagi⁹. Implements collected till then at Salavadgi were studied by Seshadri M., who had identified some of them as belonging to the last phase of Old Stone Age. In the meanwhile K.D. Banerjee found at Tamminala, a similar site and was able to successfully distinguish the last phase of Old Stone Age from the Middle Stone Age Stage¹⁰. So far about 150 sites belonging to Middle Stone Age culture have been discovered in Karnataka. Accordingly in the Bijapur and Bagalkote District also, many settlements have been reported from the river plains of Krishna, Malaprabha, Ghataprabha, Doni and Bhima.

Tamminala, Siddanakolla, Hoohalli Sindagi, Sangama, Pattadakal, Bevinall, Aihole and Salagundi in Malaprabha basin, are the places where Middle Stone Age sites have come to light. At this stage, it is unique that instead of red quartzite, the more attractive and high class fine jasper, chert, chalcedony, agate, cornelian was used. Stones were used as a raw material for making implements. In Mudhol, Lokapura, Bagalkot areas, chert is available in plenty and Middle Stone Age settlements in greater number are concentrated in this area. It should also be remembered that, quartzite available on plains in large quantity, was also used in the manufacture of these implements.

At this stage, implements like scrapers, borers, point needles, arrow heads, and small hand held axes double edged blades etc made of thin stone chips obtained from

⁹ Seshadri. M. (1961) *Stone Age Tools from Salvadagi, Bijapur District, Mysore State: Journal of University of Mysore*, Vol. 21, Mysore, PP2-10.

¹⁰ Banerjee, K.D. (1967) *Middle Palaeolithic Industries of Deccan*, University of Poona, P.20.

the pebbles are reported from different settlements. To use them effectively, bamboo and bones became complementary. Scrapers were the main implements of this stage, and scrapers of various kinds have been found Implements belonging to Middle Stone Age have been found at Ingaleswar, Thammihala, Bagalkot and other places. During this period evolved the technique of hunting down the fast moving animals by using spear, bow and arrow. Gradually it appears that men began to cover up their bodies by using animal skins and tree barks. Information relating to Middle Stone Age Culture as obtained from other artifacts collected from other places is indicative of the presence of animals like Ox, Bison, Ass, Horse, Elephant, Rhinoceros, Deer and tortoise. This also throws light on the environmental factors of those days.

Later Stone Age Culture (40,000 to 10,000 years)

This is the last stage of the Old Stone Age and the transition stage between the Middle Stone Age and Micro-Lithic age. Dr .Sundara and Seshadri have expressed doubts about the existence of this stage of stone-age culture¹¹. At Salvadagi, implements vaguely indicating the development of this stage are found. Implements belonging to this stage are also found at Ingaleswara, Kovalli, Aihole, Siddanakolla, Bevinala, Halekadivala and Udachana (Gulburga District). Kovalli happens to be the factory site¹². Implements like long choppers, Sharp borers, rubbing chips of varying sizes, needles, arrow heads, knife, and chips are common.

It appears long choppers, and arrow heads were predominant. Therefore, this culture is also called as „Chopper“ Burin culture¹³. Along with these implements made out of bones, ivory and deer horns were also used, and at that stage about twenty

¹¹Ibid., PP2-3

¹²Paddaiah (1990) *The Early Palaeolithic Phase in the Middle Krishna Basin*, Edited by A. Sundara, *Archeology in Karnataka*, Directorate of Archeology and Museum, Mysore, PP.8-10.

¹³Ibid. P-14.

different types of implements were in use. They knew the technique of fishing. At the end stage of the Stone Age, worship of Mother Goddess seems to have begun¹⁴. During this period, implements of new design like pipes or cone shaped refined long stones were made by using different techniques. In the manufacture of the implements of this culture, three types of techniques namely indirect pressure technique, centralized pressure technique and direct pressure technique were being used.

Using the long sedimentary rocks to chip out thin long flakes and having split them in angular shapes they prepared very sharp tools. viz, burin. These were fixed to sticks, bones, horns and were used in sculpting line drawings of contemporary animals. On the yellow coloured flat shaped chert stones found at Siddanakolla, a line drawing resembling bird feather is engraved. S.V. Padigar has stated that, it was a rare art model of later Stone Age¹⁵.

But, A Sundara thinks, that it is of Microlithic Age¹⁶. These types of figures are found depicted in the caves, with colours obtained after mixing minerals and plant extracts. The wild bison and bull's cave paintings of world fame are found at Altamira in Spain of Late Stone Age. In the same manner, many rare line drawings of human and animals are found in Badami and Kutukanakeri Hills. Among them, it is possible that at least some are the works of Late Stone Age man. Therefore, it can be said that the history of painting started during the Late Stone Age,

¹⁴ Jeelani S.A: P-46.

¹⁵ Ibid.

¹⁶ Pattar Sheelakanth (2000): Badami Samskruthi Adhyana, Prasaraanga, Kannada University, Vidayaranya, Hampi. PP.13-14

Mesolithic Age Culture (BC.10, 000-3000)

During this period man wandered for the sake of food, picking up roots and fruits, and hunting animals. In addition to hunting animals he captured the animals, domesticated and trained them during this period. Because of very fine and tiny stone implements were being primarily used hence the period it is called as Mesolithic or Microlithic culture. Sharp stone blade pieces were placed side by side, one after another, fixing them with the help of the glue obtained from the vegetation. Fish hooks, Knives and sickles were also manufactured. The implements of this age saved multiple purposes. For digging the soil, harvesting, making fishnets etc, these implements were being used. At the end of the Pleistocene Age there were marked changes in the climatic conditions. With a rise in temperature, along with food gathering, it appears that, the men towards the end of the Microlithic culture achieved the cultivation of tuber crops, leafy vegetables and cereals on a small scale.



Fig. 3.1 : Shidalpahdi Rock Shelter at pre-historic site, Badami

Source: travel.paintedstork.com

Shidalpahdi rock shelter

In the Khaladgi – Bheema rocky region shows use of sharp microlithic implements. There are also signs of the development in technological skill in the manufacturing of implements. As examples of artistic tastes of the age, there are a few rare red ochre paintings discovered in the caves and stone shelters at Aregudda, Kutukanakeri near **Badami**.

New Stone Age Culture (B.C. 3000-2000)

During the period spread of agriculture, increased food production, animal husbandry, use of potter's wheel in the manufacture of pottery and its varied applications have been discovered. Important feature of this stage is the manufacture of stone axes of various sizes. These axes were polished and were fitted with an arm length of wooden piece and were used in the cutting of plants and trees. This paved the way in the spread of agriculture and increased food production.

About 105 sites of this advanced culture have been found in Bheema-Doni river basin. They are found in 91 villages belonging to Indi, Sindagi and Muddebihal (north) taluks. S.V. Padiger has discovered fine surfaced axe in Budihal village of Hungund taluk. At Dhulakheda, Chenegaon, Anachi, Nagarahakki, Chikkamannur, Hanchinala and Nivalakhed there are flakes, sickles with equilateral edges, chipped stones and tiny implements of chalcedony axes of New Stone Age, red pottery resembling the models of the Jorwe culture, Grey pottery resembling the models of Brahmagiri, bones beads bangles and toys; cups grinding stones of granite, ring stones etc have been found¹⁷.

¹⁷ Ibid. PP-15-16

In Bagalkote area till now, many New Stone Age sites have been brought to light. However, in North Karnataka (including Bijapur district), in the developed New Stone Age stage, use of implements made of copper metal is noticed. In the habitation of the Krishna –Bheema river areas, evidences of copper metal using stage of human culture are found¹⁸. But in these habitations also, polished stone axes of the new Stone Age were in use in small quantities. Therefore it may be stated that the new Stone Age culture of using copper prevailed around river Krishna, and also Bheema where, copper was specially used.

Chalcolithic culture (BC. 2000- 800)

In the first half of the New Stone Age Culture, along with stone implements, bronze and copper axe, chisel etc were being used side by side. Therefore this stage of culture is also called Chalcolithic Culture. With metallurgical knowledge, they were able to make copper and bronze weaponry and jewellery. Copper bangles belonging to this culture have been found in Terdal.¹⁹

On the river basin of Krishna, Malaprabha and Ghataprabha in the district are Salavadagi, Hulagabala, Gaur, Balaganur, Matakadevanahalli, Billedevi, Malleswara, Gundakanala, Karaganuru, Kuchabala Gadisomanala etc. Sites belonging Malaprabha area are reported from Guggilamari, Thammihala, Seethidoni, Sidilapadhi and Badami. Remnants of this culture are also found at Advihulagabala, Arasanala, Bachihala, Bangaragundi, Chav nabavi, Donakamedu, Pathepura, Gonala, Hookrani, Inchagal,

¹⁸Ibid. P-16.

¹⁹Mudhol.M.S. (1997): A Technical study of Megalithic Metal Objects, Directorate of Archaeology and Museums, Mysore- P -2 and 11

Jakkerala, Kavadinatti, Kuntoji, Masanageri, Mavinabavi, Naguru, Sivapura and Siddapura.

Scholars are of the opinion that by the time of the advent of Bronze Age culture, Shiva worship was already in vogue in north Karnataka. A toy, made of mud, belonging to this culture has been found at Borage (Indi Taluk) in the area around River Doni²⁰. During this period at least three types of burial customs were in practice. They were burial, burial of the bones collected and placing the dead in a few mud pots and then burying. It appears that these people belonged to photo-Austroloid or Mediterranean race²¹.

Ash Mounds

During the New Stone Age Culture, human society began to evolve primarily as agricultural community. Mounds of ash, are yet another important fact relating to this culture that has become a subject matter of discussion among scholars.

These ash mounds are found near the settlements of new Stone Age and Bronze Age culture, Bisanala and Rajanakoluru. Scholars hold different views with regard to the ashmounds – Alchin opines that they were the result of annual ritual of burning like during the holi or deepavali festivals in the modern times ; Majumdar, Rajguru and Paddaiah hold the view that the mounds were burnt cowdung ; while Rama Reddy points to it being the result of smelting of iron ore.²²

²⁰ Nagaraja Rao, M.S. (1966) *Charcolithic Culture of the Deccan with special reference to North Karnataka*, University of Poona, Poona, PP. 10-20

²¹ Ibid.

²² Muniswamy (1999), *Bijapur District Gazetteer*, Govt. of Karnataka, Bangalore, PP. 60-63.



Fig. 3.2 : Ash Mounds of Bisnala (Bijapur District)

A. Sundara is of the view that, these remind us of the incidents of burning of heroes of yore, and a tradition reminiscent of this is the burning of heaps of cow dung, at an annual ritual²³. He also places the current folk practices came into being as a result of the burning of puranic personages like Vali, Hidimbasure and others. Also he argues that, many cave paintings found around Ramadurga and Aihole should have been the handwork of this period. In the district, ash mounds are found near the New Stone Age and Bronze Age settlements, ranging from Tardal to Nalathavada²⁴. It is found, after conducting scientific laboratory studies on the ash, that the cow dung was burnt at a very high temperature of 800-1000 degree centigrade. It is presumed that, this activity should have taken place during the period from BC 2000-800. These mounds are found at Bisnala, Siraguppi, Hippargi, Kulholi, Tardal and Budhahala, near river Krishna.

²³Interaction with R. Sundara on November 24th, 2009, Bangalore.

²⁴Jeelani S.A: PP.49-50.

Megalithic (Iron) Culture (BC 1200-300)

This is a very important stage in human development. More than 2000 settlements belonging to this Stone Age culture have been found in South India. Of them about 980 sites are found in Karnataka. Among them about 450 are burial settlements. They are found in the districts of Bijapur, Bagalkote, Gulburga, Raichur, Bellary, Chitradurga, Kolar, Bangalore and South Canara. Their high concentration (about 400) settlements are found in the northern plains on the upper banks of river Krishna.

Settlements belonging to this culture in the district of Bagalkote are found in the Kaladgi rocky peaks at Terdal, Alingali, Hanagandi, Madanahatti, Assangi, Jagadala, Kakhanuru, Kaladgi, Seethidoni, Guledagudda, Pattadakal, Akkaragal, Aihole, Kyadigeri, Bachigudda, and Chillapura. Similarly, they are also found in the rocky peaks around river Bheema at Budhihala, Talikote, Maskanala, Salvadagi, Matakadevanahalli and Banahatti. The habitation settlements of this culture are generally found on the riverbanks. Burial complexes and stone tombs are found around places where plenty of big stone and iron ore deposits are found. But the habitation settlements of this culture found at Terdal, Halingali and Aihole are found in equal proportion, both on hills and plains. During this period, agriculture was extended by clearing the bushy, thorny and evergreen forests. Increased crop production during the phase was possible by way of irrigation.

Their burial systems are varied and unique with 12 types that were in practice, some of them being stone chambers with pot holes, stone circle, sarcophagus, menhirs, urn burial etc. Among the rock cemeteries, stone chamber appear to be popular. Their

base plan is very simple with one quadrangular space unit, and the execution displays skill. Such of the cemeteries are also found at Aihole.

At *Akkaragallu* near Pattadakal, there are about 20 dolmens and from a study based on them, Sundara has pointed out that there is the possibility of the pot hole chamber typed of cemetery which may have evolved from stone chamber cemetery model. In *Bachigudda* village near Pattadakal there are two cemeteries, one of each resembling stone chamber cemetery and pot hole burial chamber. Similarly, in Aihole, near Meguthi temple area there are many dolmens. Adjoining to the left of a Jain shrine, in the area of Kyadegeri-Ainapura, the presence of dolmens is noteworthy.

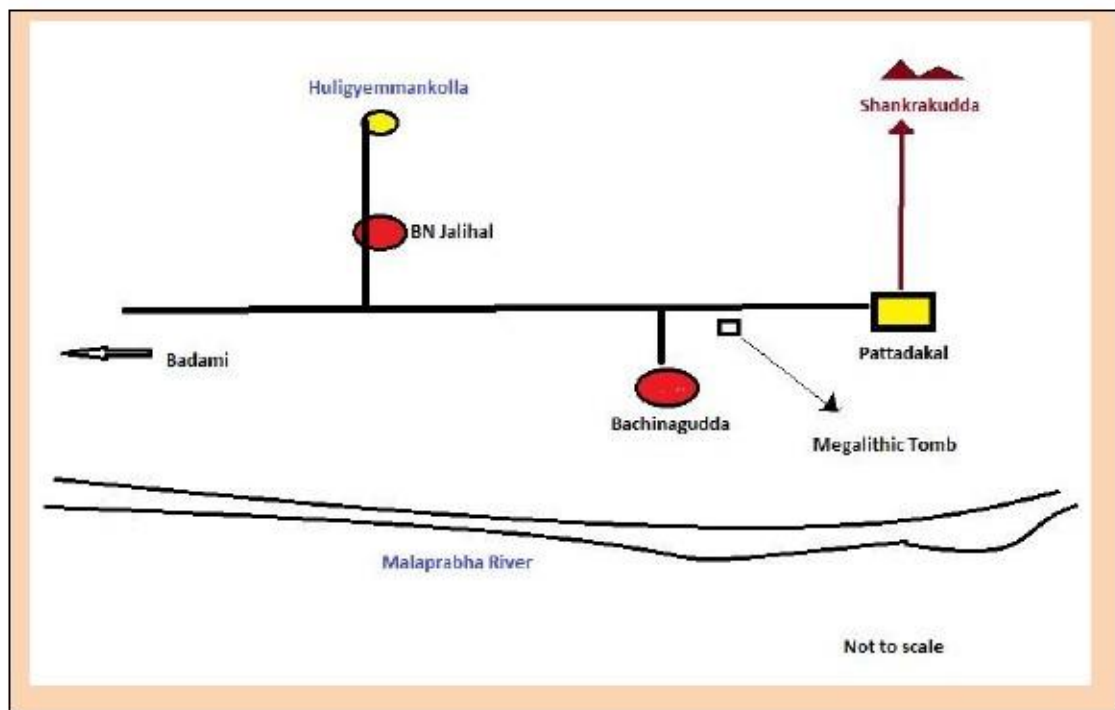


Fig. 3.3 : Megalithic Site of Bachinagudda

It may be seen that, the burial pits in the pot hole chamber and canal room cemeteries at Pattadakal-Aihole built of stone-slabs are obtained from Kaladagi-Bheema range of red sand stone, and fine white quartz stone. Even the Charcoal pieces

found in the stone cemeteries at Halingali and Terdal have been subjected to Radio-Carbon-14 test and dates are fixed serially as BC 1800 and BC 1770, by the scholars²⁵.

The stone burials of this culture are helpful in pointing out their social system. People of this culture belonged to different social division like hunters, carpenters, stone cutters, agriculturist, potters, smiths, basket-weavers, weaver *soldier* etc. Iron furrow, sickle, axe, and swords were used in cultivation. Spear, dagger and arrow heads were weapons. Stone weapons had become rare by that time. They were cultivating cereals and pulses like paddy, ragi, wheat, maize, tur etc. Sheep, goat, poultry, ox, buffalo, dog, horse etc, had been domesticated.

Yet another specialty of this culture is symbolic anthropomorphic figures made of Stone. These types of anthropomorphic figures are reported from Coorg, Bellary, Bijapur, and Raichur districts in the stage. The pot hole stone burials found in Aihole settlement is an unusual stone, cut to human form, with out clarity. This is 1.5 mts high with its upper end bearing the crescent called as Pandavarakallu locally²⁶. This is believed to belong to the earliest stage of Karnataka iconography.

Prehistoric cave paintings

Prehistoric cave painting and line drawings on rocks in the open fields are reported from Bagalakote district. Most of these are found in rocky environmental habitations, and line drawing on open rocks is found in small number.

²⁵ Jeelani, S.A. P-51.

²⁶ Ibid., PP.54-55



Fig. 3.4 : Masked Human figures and Animals – A painting from Badami

Source: Mathpal : Prehistory of Karnataka, 1976

Their age can be fixed between the Later Stone Age and Megalithic Cutters cultures. In the other places belonging to this area, of Chalcolithic and Megalithic fascinating paintings on pottery in the form of line drawings and pseudo toys there are found some rare cave paintings around *Badami*, *Hosa-Mahakuta*, *Kutakanakeri* and *Aihole* ranging from Microlithic age to the days of Chalukyas of Badami²⁷.

²⁷Mathpal Y. (1998), *The Early Paintings of North Karnataka*, Archeology in Karnataka, Directorate of Archeology and Museum, Mysore P-128.

The two peculiar line drawings found in Badami, also belong to Microlithic period. Of them the white coloured bird and snake deserve a mention.

Anthrophomorphic and line drawings of animals found at Kutakanakeri belong to the Microlithic age. At three places in Aihole there are colour paintings, one of them is of an animal carved out of red coloured-mud with stripes on its body.

S.V. Pedigree has discovered a chert core stone at Siddanakolla, upon which is engraved picture that belongs to the Microlithic Age. Similarly, at Kulholli are the line drawings of Bull, Calf, Deer, Man etc, that belong to Megalithic Age. Line drawings of two bulls, standing one against another, are found with their horns bent forward. This picture has got emphasis on finer aspects rather than its physique. A. Sundara, is of the opinion that, they are the works of the men of either Chalcolithic or megalithic culture²⁸. There is a line drawing resembling perhaps a hunter's net with a picture resembling a bison inside that, on a stone shelter at Seethidoni.

This is indicative of the practice of hunting by the method of swinging the hunter's net. Pre historic paintings are plenty in the district in and around *Aregudda* and *Hiregudda* between *Badami* and *Pattadakal*. A. Sundara, Irwin Newmayor and Yashodhara Matapal have identified about ten settlements with colour paintings. These paintings belong to Chalcolithic culture. In one of the caves at Badami paintings with black and white colours of animals, birds and human figures with rare pictures in double colours have also been found. The above scholars have considered these as rare discoveries belonging to Later Stone Age.

²⁸ Mathpal, Y., .P-273.

Historic Period of Badami

We can trace the definite beginning of the History of Karnataka; from the period of Mauryas or precisely to the third century B.C. Maurayan Emperor “Devanama Priya Priyadarsi Ashoka” was ruling almost all over India including northern parts of Karnataka. Ten minor Rock Edicts and Four Major Rock Edits belonging to the period of Ashoka are reported from Chitadurga, Bellary, Raichur and Gulbarga Districts. These important edicts are found at Siddapur Brahmagiri, Jattingaramesvara, Maski, Koppal, Nittur, Udayegola, and Suvarnagiri. But Ashoka’s rock edicts have not been found in the Bagalkote district till now. It is recorded in the Singiraja purana, a work of 15th century that the province of Pattadakal was within the control of the Nandas ²⁹. Even its fact that the Ashokan Edits found in neighbouring district of Bagalkote at Sannati, in Kalburgi district, Koppala and Maski in Raichur district, thus it may be presumed that Bagalkote district also had come under the administration of the Mauryas.



Fig. 3.5 : Northern Karnataka (arrow showing Bagalkot District)

²⁹ Jeelani.S.A. P-161.

Satavahanas

The area around Badami, Pattadakal, and Aihole has archeological evidence which is of Satavahana period. At Aihole underneath the Ambigera Gudi pottery and brick remains have been unearthed. Huchapaya mutt complex of same place coins and pottery pieces were found. In the Pattadakal Sangameshwara guide is found a brick mantapa of Satavahana period so also a Jaina Thirthankara idol and a brick Jaina temple (Jinalaya). Thus it may be said that Aihole and Pattadakal were religious centre where temples played a very prominent role during Satavahana rule.³⁰ Some of the coins of the Satavahanas have also been discovered at Aihole and Pattadakal besides several other regions in Karnataka as shown in the following figure.

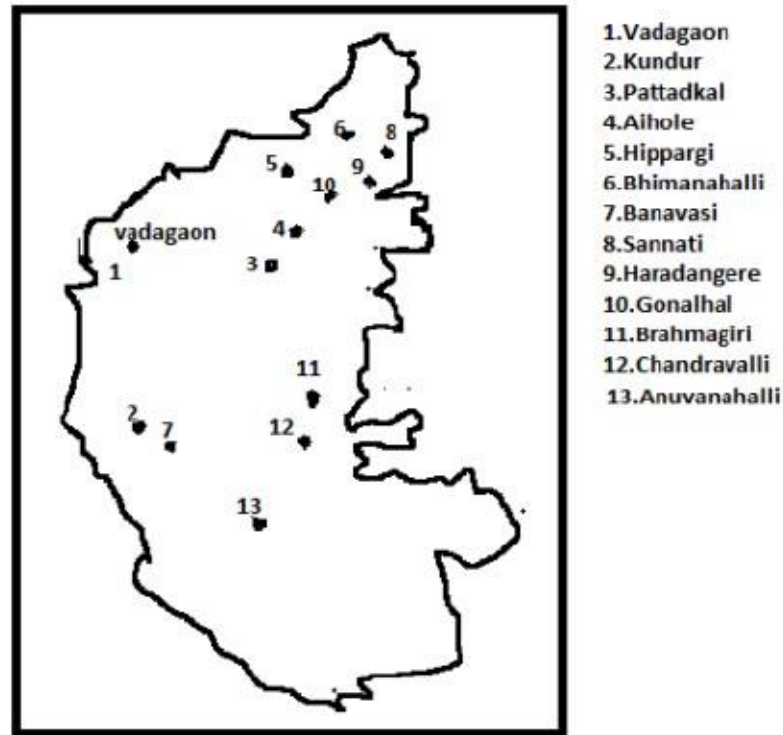


Fig. 3.6 : Places where Satavahana's period Coins found

³⁰ Sundara. A: Pattadakallina Chalukya Porvakalada Ondu Ittige Kattada. (Badami Chaalukyaru Lekhna Samputa, chief editor A Murigeppa) Prasaranga, Kannada University, Hampi. pp-419-423

Even in neighboring district of Bijapur, at Hippargi copper coins of Satavahana period are found. An inscription found at Vasana, (the village on the borders of Nargunda taluk, Gadag district, the neighbouring district of Bagalkote) in Prakrit language, which belongs to the period of Vasistaputra Pulomayi, refers to the construction of a Shiva temple by Chanda, a devotee of Shiva³¹.

The excavations at Wadagaon Madhavapura, in Belgaum district reveal that it was a centre of commerce during Satavahana period. Numerous inscriptions of the Satavahans are found in different parts of Gulbarga district which lies to the northwest of Bagalkote district, and in Sannathi itself, the Buddhist centre, about 90 inscriptions have been found. In about 150 AD, Ptolemy or Claudius Ptolemaeus who lived around A.D. 90- AD 168 was a Greco-Roman writer of Alexandria, and a mathematician, astronomer, geographer and astrologer. He mentions about Badami, Pattadakal, Indi, Kalageri, which is indicative of the fact that, by that time these cities had developed as important centres of commerce.

Bachinagudda and Megalithic tomb site

In these settlements are found red painted burial pots and remnants of black and red pottery. There is possibility of many more important facts coming to light from the study of these settlements. After the Satavahanas, the Kadamba dynasty appeared on the political arena of Karnataka, but their administrative hold on Bagalkote district is also doubtful.

³¹ Kamath, Suryanath (2005) *A Concise History of Karnataka*, Jupiter Publications, MCC, Bangalore, P-56.

Kadambas

The first dynasty of Kannada origin to have ruled over Kannada provinces were the Kadambas with Banavasi as their capital. Mayuravarma, the first ruler of the dynasty who defeated the Pallavas and established a kingdom which is believed to have extended from the sea in the west to Prehara in the east, which is also known as river Malapahari or Malaprabha. If this is accepted, Mayura Varma's territory probably comprised of Belgaum, Dharwad and Bagalkot districts. The inscription and Jain Basadi at Halasi in Belgaum district that belonged to the period of Kadamba king Mrigesha Varma, indirectly points to the possibility of influence wielded by the Kadambas on the neighboring Bagalkot district. Recently, from the environs of Badami, two - armed Narasimha made out of burnt clay, a Ganapathi, and a Thirthankara figure from Pattadakal etc, are reported and it is held that they belong to early Kadambas.³² In front of the Sangameshwara Temple at Pattadakal, to the left of the Jaina temple are two temple remains of pre-Chalukyan times, which are built of bricks. Similarly, the Ambigaragudi at Aihole of Badami Chalukya period and Sangameshwara temple at Pattadakal are also built on the basements of Pre-Chalukyan times. To this district belongs the credit of providing the right political platform to the Chalukyas of Badami. There are other historical and cultural centres at Gudnapura, Talgunda, Gokarna, Kunduru, Sonda, Byagadde, Daneshwar etc. which belong to the times of Kadambas.³³

Kadamba architectural features may also be discussed in the temples of early Chalukyas. During Satavahana and Kadamba periods it was brick structure but Chalukyas later started using stone instead of brick. During Satavahana period, Badami

³²Jeelani S.A. P-54-55

³³Prabhu K:- Cultural Centres around Banavasi. in Narasimha Murty : (ed)Excavations at Banavasi, 1997, Directorate of Archaeology & Museums, Mysore .PP-.46-47

had developed into an economic centre. As referred to by Ptolemy who calls Badami as Badiamaioi.³⁴ Ptolemy speaks of the route from Kalagi to Ballari not far from the Malaprabha and mentions a tributary of the Krishna. We also speak of Badiamaioi, having a hill fort³⁵. This evidently did not belong to the period of Pulakesi-I. In all probability Badami may have gained prominence from the beginning of 2nd century AD.

Chalukyas of Badami

The Chalukyas of Badami (Vatapi), who ruled between 540 to 753AD, ruled over an extensive empire that extended from the Cauvery to the Narmada, and held their sway over the modern States of Karnataka, Maharashtra, Goa, and parts of Gujarat, Madhya Pradesh, Orissa, Andhra Pradesh, Telangana and parts of Tamil nadu. The inscriptions of Chalukyas of Kalyana like Nilagunda inscription of Vikramaditya-VI informs that the family was originally from Ayodhya, and 59 kings of the family ruled from that place. Later 16 princes of the family ruled from South India. The court poet of Vikrama-VI, Bilhana mentions in his work Vikramanka Deva Charitha, that on one occasion, when Bramhadeva was engaged in the morning Sandhya devotion, God Indra came up to him and complained of the ever increasing sinfulness of the world in which no man performed Bramhanical sacrifice and rites or offered obligations to Gods. He prayed to the Lord Bramha to create a hero powerful enough to destroy wicked people. Later Bramhadeva looked at his Chuluka i.e the hollow of his palm where he held water. In the course of devotional exercise for the purposes of pouring out libation; from it sprang a mighty warrior capable of protecting the three worlds. In

³⁴ Crindle Mc W John),(2000): Described by Ptolemy, (Originally Published in 1926, Munshiram Manohar Lal Publication (P) Ltd. New Delhi. P-135 Also James M Campbell:Gazetter of the Bombay Presidency Vol-XXIII-Bijapur, 1884, Government Central Press,Bombay P-234

³⁵Ibid

this family were born two great heroes, Harita and Manavya who were the ancestors of Chalukyan family.³⁶ Bilhana, further informs us that the original home was Ayodhya and in the course of time, they migrated to Dakshina Patha and established their power. In the inscriptions of the Western Chalukyas, the name of the family is given as follows:

1. Calkya³⁷ (Badami inscription of Keerthivarma I).
2. Chaliky³⁸ (Nerur grant of Mangalesa).
3. Chaliky³⁹ (Mahakuta pillar inscription of Mangalesha).
4. Chalukya⁴⁰ (Aihole pillar inscription of Pulakeshi II).
5. Culukiki or Chulki⁴¹ (Lonaner Plates of Satyasraya (Pulakeshi II).
6. Calukki⁴² (Navasari plates of Pulakesiraja).
7. Calki⁴³ (Chandana Inscription of Vijayaditya).

There are many other stories about the origin of this family as stated by K.V Ramachar in his book "Chalukyas of Vatapi". Many Scholars have worked on kannada origin, like S.C Nandimath who holds the view that the word Chalukya or Chalki must have originated from the Kannada word Salki, an agricultural implement, and this indicates their Kannada origin. They must, have been peasants taking martial career.⁴⁴

The ascendancy of the imperial Chalukyas of Badami inaugurates a new epoch in the political and cultural history of South India in general and Karnataka in particular. Infact the early Western Chalukyas were the most important dynasty of

³⁶ Murthy Srinivasa HV: The Origin of Chalukyas 1978 (Ed by M.S.Nagaraj Rao), the Chalukyas of Badami, The Mythic Society, Bangalore.

³⁷ IA. Vol no 111 PP-305-306

³⁸ IA. Vol. no VII, Pp-161-162

³⁹ IA vol. no XIX, pp-7-2

⁴¹ EI . Vol. XXXVII, PP.37 -41

⁴² CII. Vol. No IV, pt-1, pp137-145

⁴³ EI . Vol. XXXVIII. pp 335-37

⁴⁴ Nandimat.S.C: Karnataka Parampare (1992), Kumaran Publication, New Delhi, Vol.1..P-238.

rulers who held sway over the Deccan before the foundation of Vijaynagara⁴⁵. The early Chalukyas were serving as subordinates or the feudatories under the Kadambas of Banavasi in the beginning of the 6th century AD. Taking advantage of this weakness of the Kadamba authority which was declining, the early Chalukya rulers over powered them. As most of the territories formally under Kadambas were then included in the newly established Chalukya Kingdom, it becomes evident that the early Chalukyans of Badami were the direct political successors of the Kadambas of Banavasi.⁴⁶ The earliest known member of the Chalukyan dynasty is Jayasimha-., (C.500-520A.D) His son was Ranaranga and grandson Pulakeshi I. Though in the genealogy of Chalukyas, not much information pertaining to them is available, Pulakeshi is considered as the founder of the Chalukyan Empire.

Pulakeshi- I (540 -565): Pulakeshi was empowered for about quarter century and the Badami cliff record of Pulakeshi I (Polekeshi to be true to the record) dated 543AD says that he was the son of Ranaranga and the grandson of Jayasimha. Pulakeshi I built the hill fort at Badami and performed horse sacrifice. He started ruling from 540AD, he held titles like Satashraya and Vallabha and called himself as Dharmamaharaja. He had as his crowned queen Durlabha Devi, and a queen called Indukanti. Pulakeshi was the first sovereign ruler of the family who over threw the Kadambas.

Keertivarman-I: Pulakeshi was succeeded by his son Keertivarman-I in 566AD. According to the inscription of Keerti Varma I⁴⁷, he was also known as Pugavarman and Kattiyarasa. He expanded the kingdom by defeating the Nalas, the Mauryas of

⁴⁵ Yazdani.G: (Ed) Early History the Deccan. J.R.Publication, New Delhi, Vol -1-6.P-204.

⁴⁶ Desai.P.B: A History of Karnataka.1970.Dharwad.P-89.

⁴⁷ Padigar.V. Srinivas (Ed) (2010):Inscription of the Chalukyas of Badami(543-757 A.D) Indian Council of Historical Research. New Delhi.PP-9-10

Konkan, the Gangas and took their kingdoms under his control. Inscriptions describe him as having conquered the Anga, Vanga, Kalinga, Mattura, and Vajrka in the north and Kerala, Mushaka, Pandya, Dravida, Chola and Alupas in the south. ⁴⁸ It is evident that Chalukyas had huge army to conquer all these places. During the rule of Kirthivarma-I his brother Mangalesa, as crown prince played a very important role. According to the orders of his brother, in AD 578, Mangalesa got the third cave temple at Badami carved out, installed the statue of Vishnu, made a land grant of the village Lanjikeswara on the specified date for Narayana –Bali and for 16 Brahmanas in the temple.⁴⁹ The donated village Lanjisvara has been identified with Nandikesvara near Mahakuta in Badami taluk. ⁵⁰

On the either side of the cave temples and the nearby boulders can be are inscriptions revealing names of sculptors. On a rock to the right of cave III, an inscription reads Rupasekharah which literally means „best among sculptors“ ⁵¹ The other names found are Kottalam, Sri Kondaimanchi, Sri Vasudeva, Sri Shakula Ayya, Sri Panchanan Chola Devareya, Sri Gunapal, sri Aju, Achar Siddhi, AryyaChatti, „Sri Jayakirthi, Kottila, Sri KantiManchi, Sri Samichandan, Bijaya, Sri kannan, Ovaja, Bijaya Ovajan, Shri Prasannabuddhi, Shri Arikke, Shri Bhadukke, Shri Geveyan, Sri Anattamanchin and others⁵² The Godachi copper plate of Kattiarasa or Kirtivarma-I says that Kirtivarma was not present on the occasion of the inauguration of cave III at Badami, excavated at the orders of Mangalesha. It is held that ill health may have been the cause for his absence. On the basis of Kappe Arabhatta’s inscription at Badami, Sheelakanta Pattar, opines that Kappe Arabhatta of Badami, may have been

⁴⁸ Padigar.V.Srinivas, PP-12-15

⁴⁹ Karnataka Inscriptions: volume –V, no 1, Karnataka Research Institute, Dharwad.

⁵⁰ Op.Cit.

⁵¹ PattarSheealkanth (2014): The Architects and Sculptors of Early Chalukya Art Shipa Publication, Badami. P-13

⁵² Ibid;

Kirthivarma I, himself and probably Kirthivarma suffered from leprosy, and points to the statue in the Kushtaraya temple in Badami. As Kirthivarma's sons Pulakeshi-II, Kubja Vishnuvardhana and Dharasrya Jayasimha, were minors, Mangalesha took control of the Empire after the demise of his brother⁵³.

Mangalesha (536-608)

Mangalesha ascended the throne in 596 A.D., as the sons of his brother Kirthivarma were minors. During his reign he defeated Shankaragan and Buddharaja of Kalachuri family who held Gujarat and Khandesh, and conquered the provinces. Mangalesha succeeded in defeating and conquering Swamiraja who was ruling the island of Revati. It appears that he had established a strong navy for this victory, later the island was handed over to his feudatory, Satyasraya Dhruvaraja Indravarma. It is a fact that not only army, Chalukyas had even navy. The Mahakuta pillar speaks of Mangalesha having got cave no. III excavated at Badami.⁵⁴ Records of his fifth year rule speak of his victories over Ganga, Dramila (Pallava), Chola, Alupa and the Kadamba rulers. When Mangalesha did not relinquish the throne, Pulakeshi-II rebelled against and killed Mangalesha. Later Pulakeshi came to throne at Badami.

Pulakeshi II (608-642 A.D.)

Pedda-Vadagur inscription speaks of the birth name of Pulakeshi II as probably Erya.⁵⁵ Pulakeshi II, expanded his empire to river Narmada in the north, and Aihole inscription speaks about him as having become the sovereign of the province the „Maharashtrakatraya“ or owner of 99,000 villages⁵⁶. He had the title “Parameshwara”.

⁵³IA.,vol X, PP-56-57

⁵⁴IA. Vol.XIX, PP-7-20

⁵⁵EL.vol.no III, PP-50-52

⁵⁶IA.,vol VIII, P-237

As a consequence, Pulakeshi had naturally to oppose Harshavardhana across the River Narmada. After his coronation Pulakesi II had to face two refractory chiefs, Appayika and Govinda. According to the Aihole record, this was followed by his destruction of the Banavasi fort and subduing of the Kadambas. The Gangas and the Alupas surrendered voluntarily. The Maurayas of Puri (Rajapuri) were defeated with help of a navy and rulers of Lata (Gujarat), Malvand and Gurjara submitted to him. His expedition went upto Kalinga and Vishukundins. His campaign further south made the Pallava ruler take shelter in the capital of Kanchi. But Pulakeshi commissioned the second expedition to Kanchi, in these battles not only Narasimhavarma had an upper hand, but was also able to drive the Chalukyan army back, and laid siege to Vatapi itself, in the thirteenth year of Pallava Narashimavarma's administration (about 642-43). Narasimhavarma took possession of Vatapi and got an inscription engraved on the rocky mounds south of Badami as "Vatapigonda", the newly taken title after defeating the Chalukyas. This was caused on the same old stone inscription originally set up by Pulakeshi, proclaiming proudly that he took over that fort stated to be impregnable by Pulakeshi -I. This is to be seen on the inscription located near the Badami Museum.

Pulakeshi II was also a patron of art and Literature. He was a typical product of his times holding many titles like Satyaraya (the refuge of truth), *Pritvivallabha* (lord of the earth), Parameshwara (the supreme lord), Maharaja (the king) Maharajadhirajah (King of Kings) *Pratapatisayopanata-Samagra-samanta* –Mandalah⁵⁷. (a Chastiser of powerful enemy kings), Paramabhagavatha [a great devotee of Lord Vishnu], and Dakshinapatheshwara (lord of the entire Deccan). During his period Hiuen Tsang, the Chinese traveller visited the Empire. Where in who recorded the prosperity of

⁵⁷ Ibid-p-64

Pulakeshi's empire. According to him people were lovers of peace and were of friendly disposition, simple, prompt, grateful and known for their straight forwardness; they chased out the enemies and defrauders without mercy⁵⁸. Similar type of statements can be found in the famous Kappe Arabhatta inscription⁵⁹.

Pulakeshi-II's rule was affected for a period of about thirteen years until once again his son Vikramaditya- I re-established the supremacy of Chalukyan dynasty in 654-655 A.D. Pallava Narasimhavarman I(630-668 A.D.) who took revenge against Pulakeshi's earlier victory over the kingdom during his father's reign, defeated Pulakeshi in a dreaded battle at Pariyala, Manimangala and Suramara and has left his own inscription dated in the 13th year of his rule on the boulder of Badami symbolizing the word „Victory „, written on the back of Pulakeshin II.⁶⁰ It will not be wrong to presume that though Pallava Narasimhavarman conquered the Chalukayan kingdom, being far away at Kanchi, he would never have had the grip in the day to day administration⁶¹ over Badami.

Though Narasimhavarman conquered Vatapi and got the title „Vatapigonda“, and had control over this region for 13 years. It appears that there was hardly an attack on the fort as there is no evidence to the fall of fort or damage caused to fort.

The next ruler was the younger son of Pulakeshi II, who had suppressed the civil war, liberated Vatapi, the capital from Pallavas, proclaimed himself as an independent king and thus came forward for the re-establishment of the Chalukyas.

Vikramaditya –I (655-681 A.D)

⁵⁸Venkatachala T. V. (2009) *Badami Chalukyaru – Lekhana Samputa*, Hampi University, PP-74-80.

⁵⁹IA. Vol.no X. PP-61-63

⁶⁰EL. Vol no III, P-277

⁶¹Madava.N Katti: 1978, *The Pallava Interregnum*, The Chalukyas of Badami, The Mythic Society .Bangalore. P - 68.

One of the sons of Pulakeshi II, came forward to put down the disturbances and re-established the greatness and glory of the Chalukyan Empire which had witnessed the downfall due to Pallava invasion. He ascended the throne in AD 655, say his Talamanchi⁶² and Godwal⁶³ copper plate inscription. There is a reference that he defeated Trai rajyadipatis or three kings and got into power. These inscriptions say that he single handedly conquered battles defeated the enemy kings with the help of his horse named Citrakantha and sword. He fought many wars and acquired victories, and his career was one of continuous fights against the traditional enemy the Pallavas. The Chalukyas regained their prestige because of his valour and after him, his son Vinayaditya ascended the Chalukyan throne in AD 681.

Vinayaditya (681-696 A.D.)

Vinayaditya played a prominent role in his father's wars against the Pallavas in 655 A.D. itself and he was the crown prince from 678AD. He ascended the throne in the year 681 AD. The Jejuri⁶⁴ Plate inscription speaks of Vinayaditya's conquest of Pallava, Kalabhra, Kerala, Cola, Pandya etc., and also speaks about the conquest of Haihayas or the Kalachuris of central India. The Kolhapur Plates⁶⁵ speak about his land grant. His son Vijayditya as Yuvaraj led the invasion against Malwa and defeated the enemy, but got arrested by the pursuing enemies while he was returning. He had to struggle for a period of five years to escape from the imprisonment. About 30 inscriptions belonging to the period of Vinayaditya have been reported so far.⁶⁶ But not

⁶²EI. Vol no IX, PP-98-102

⁶³EI. Vol.X PP-100-107

⁶⁴EI Vol no XIX , PP- 62-65

⁶⁵KI. Vol. no II, No 3, PP- 6-11

⁶⁶District Bijapur District Gazetteer (2006): (ed) by Jeellani S.A , mention is made of a total 25 inscriptions of Vinayaditya but in Padigar.V. Srinivas (Ed): Inscription of the Chalukyas of Badami (543-757 A.D) 2010, Indian council of Historical Research. New Delhi. mention 30 inscriptions of Vinayaditya

a single inscription belonging to his period has been found from Bijapur and Baglakot districts.

Vijayaditya (696 -733A.D)

Among the Chalukyan kings Vijayaditya ruled for longer period. He issued many inscriptions and made land grants to temples and Agraharas. Alampur inscription ⁶⁷ of Vijayaditya was found on a stone fixed in the fort wall near Devadroni. It is an important inscription regarding building of fort wall or some enclosure to the temples. The inscription informs about the fact that Vinayavati, the royal queen and Vijayaditya's mother built the Trikuta temple (Jambulinga temple) for Brahma, Vishnu, and Maheshwara at Badami and his sister Kunkumamahadevi built Annesajje Jinalaya at Lakshmiswara.⁶⁸ The inscription further mentions that Vijayaditya's beloved „Sule“ Vinapoti, her mother Kucipoti and her grandmother Revamancal, had danced at Mahakuteshwara temple. The king having given dana (gifts) caused to be made a golden pedestal with rubies, and set up a silver umbrella over the god, and gave a field measuring at Mangalulle⁶⁹. Jainism, Buddhism, Saivism and Vaishnavas, were patronized by him similarly Mallikarjuna temple of Mahkuta. Ladkhan, Huchappaiah temple, Huchappaiah Mata of Aihole and Lakulisa temple of Siddnakolla were constructed during this period. During his rule he built a fort at Alampur, Mahanandi and Panya⁷⁰.

Vikramaditya-II. (733-745 AD)

Vikramaditya had worked under his father Vijayaditya and grandfather Vinayaditya as Yuvaraj. He is said to have invaded the Pallavas thrice and defeated them. This is seen

⁶⁷ EI. Vol.XXXV. PP. 121-24

⁶⁸ SSI, Vol. No XX, pp 46-47

⁶⁹ I.A. Vol no X PP- 102-103

⁷⁰ EI. Vol.XXV. PP. 121-24

from the inscription in Pattadakal. Kanchi inscription⁷¹ of Vikramaditya II states that king Vikramaditya–Satyasraya captured Kanchi and having examined the riches of Rajasinghesvara returned them to the temple with generosity. In his South Indian expedition against the Pallavas he did touch the Pandyas, the Cholas, the Keralas and the Kalabhras. Instead it resulted in the surrender of all of them. It is said that in memory of that success he erected a pillar of victory on the southern seacoast⁷².

Kendur⁷³ plates speaks that he was trained in science and the use of arms from his childhood. Vikramaditya II appears to have died sometime in 744-45 A.D. As Kirtivarman was already on the throne by that time, Vikramaditya's rule lasted hardly for about 11 years. He was a lover and promoter of religion. He granted funds for construction of temples like the famous Virupaksha at Pattadakal. He appreciated artists and gave donations to religious institutions.

Kirtivarman II (744- 752 AD)

He was the last among the Chalukyan emperors. He became the yuvaraja, during his father's rule and had led successful expedition against the Pallavas, and gained the appreciation of his father. His tenure was very peaceful, but the foremost among feudatories of Chalukya Vikramaditya II, Rashtrakuta Dantidurga defeated Kirthivarman⁷⁴, proclaimed himself as the sovereign by setting aside the Badami Chalukya rule and laid the foundation for the establishment of the Rastrakuta power.

⁷¹ EI. Vol.III, PP-359-360

⁷² EI. Vol.V, P-22

⁷³ EI, Vol no IX, PP.200-207

⁷⁴ IA., Vol no XVIII, PP-38-40

After Chalukyas many dynasties have ruled over Badami.

Among them

Rashtrakutas of Malkhed were the most prominent. Malkhed originally called

Manyakheta was the capital of Rashtrakuta Empire from 814 A.D to 968 A.D.



Fig. 3.7 : Malkhed Entrance No. - 1

Of the Rastrakuta period, five inscriptions have been identified so far. The inscription at Badami makes a mention of Kaliballahanu who was probably regional administrator⁷⁵. An inscription of Rastrakuta Krishna-II is available on the wall of the Ladhkhan temple at Aihole. A Veeragal found at the Hucchimalligudi at Aihole and presently placed in the Aihole museum and also belongs to Rastrakutas ⁷⁶. Ravalpadi cave inscription⁷⁷ of Aihole is on the right wall of the Ravalpadi temple issued by Rastrakuta ruler Amogavarsha Nripatunga. It mentions the fact that certain Suryakartha Bhatara and Balakarthara Bhatara spent the Chturamasa there.

⁷⁵ KRI, 1941 – P- 38

⁷⁶ Annigeri.A.M: Aihole Samskruthi Mathu Kale, 1974, Karnataka University, Dharwad.

⁷⁷ Ibid.; P.153

During this period Badami became an administrative centre of Rastrakutas. A few temples have been attributed to the Rastrakutas and in all probability a fort wall was erected during the period if not an additional fort as there is no inscriptional evidence to support it.

Kalyani Chalukyas

The temples of this period are found at Badami, Pattadakal, Banashankari, and Aihole.

The Mallikarjuna temple, located on the left side of the museum at Badami, and Yellamma temple on the western side of the Agastya Tirtha temple on the left side of the Banashakari temple near Badami and the Jaina temple at Pattadakal were built during the period. Feudatories of Kalyani Chalukyas like Shindanur chieftains ruled over Badami and the surrounding provinces. Immadi Sinagan and Immadi Somashekara ruled for some time around 1076 AD.⁷⁸ Later his son Achugi and grandson Perumadi also ruled as feudatories of Vikramaditya VI and Immadi Jagadekamalla. For some time even Immadi Chayunda brother of Peramadi- I, ruled as a feudatory of Taila⁷⁹, who ruled over Kisunadu.⁸⁰

Kalachuris (1162-1184 A.D.)

Among all royal families in Karnataka, Kalachuris ruled over the region for the shortest period. They were recognized feudatories of Chalukyas of Kalyana. As such they are spoken of as *Mandalika*. Badami was under the administration of Kalachuri Sankamana⁸¹ around 1178 AD,

⁷⁸SII, Vol –XV PP -2-3

⁷⁹IA, Vol no IX P-96-97

⁸⁰IA, Vol no X P-169

⁸¹SII, Vol no XV, P-154-155

Seunas of Devagiri (1180-1320 A.D.)

Among the dynasties that ruled Karnataka during the medieval period, the Yadavas or Seunas of Devagiri and Hoysalas of Dwrasamudra are famous. It is a historical truth that earlier both these royal dynasties had accepted the sovereignty of the Chalukyas of Kalyana and remained sincere. However, towards the end of the reign of Somaeshwara-IV, Hoysalas in the south and the Seunas in the north of the Kalyani Chalukyan territory declared their independence, and entered into a mutual struggle to capture Kalyana, the capital. Badami situated above Tungabadra River came under the Seunas. An inscription speaks about a tax officer Kandraaya⁸² who collected taxes as staying at Badami.

Vijayanagara Empire

The Vijayanagara came into existence in 1336, on the southern bank of River Tungabadra. Badami and surrounding province had come under the administration of the Vijayanagara Empire stands proven from several inscriptions reported from Badami. The Badami inscription⁸³, belonging to the first King of the Sangama family, Harihara-I (1336-56) refers to the construction of a fort at Badami enclosing the entire town. On a large rock near Thattikoti Maruthi Batterappa temple, belonging to 1340AD, Harihara is mentioned as Mahamandalaeswara, Aritayavibhada, Dashere, Tappura Rayara Ganda, Purva Pashchima Samudradipathi, and Sri Hariyappa Wodeya. The inscription further informs that Dandanayaka Chameyanayaka gave as sarvamanya gift (Dhana), the villages of Badami and Mundanuru to the 2000

⁸² SSI, Vol.-XV-P -154

⁸³ IA, Vol No X -PP-61-63

Mahajanas of Badami in the presence of God Bhuthanatha and erected Badami Durga (fort) and eastern enclosures.

By this time Badami was the northern border of the Vijayangara Empire and was a capital for the adjacent provinces called Badami Seeme. By nature and viewed from military logistics, it was strategically located. Slightly north of that was Bijapur, which was already under the control of the Bahamanis. Thus Badami bordered the neighboring Bahamani Kingdom. Therefore to gain strict control over Badami seeme and for purposes of safeguarding the frontiers the expansion of the Badami Durga or fort seems to have been done under the leadership of Hari Hara –I.

The fort must have undergone renovation several times. We have inscriptional evidence that during the rule of Sadashiva raya (1548-1572) the fort of Badami had been renovated⁸⁴. One more inscription of Kondaraja and Krishnappa⁸⁵ administrator of Badami Seeme, have done renovation of Badami fort. It is evident from the above sources that Badami, under Vijayanagara kings had relevance for protecting the entire Badami Seeme. On the downfall of Vijayanagara, Badami came under Adil-Shahis of Bijapur. 1722 Hyderabad occupied both Bijapur and Bagalkote districts. Upto 1744 Badami was under the administrative responsibility of Nasir Jung, and then the territory fell into the hands of Nawab of Savanur. Later in the year 1746, as per the agreement, between the Nawab of Savanur and the Peshwas, the provinces of Bagalkot and Badami were relinquished to the Marathas Peshwas. The Peshwas entrusted the responsibility of these provinces to Malahari Rao Rasthiya⁸⁶. Later from 1774-78 AD Maratha provinces below Krishna River came under Hyder and Tipu. Badami under Tipu witnessed considerable development in defence architecture. He renovated the northern

⁸⁴SII., Vol-no –XVIII, PP-282-283

⁸⁵I.A Vol no X, P-63

⁸⁶Jeelani S.A:Biapur District(Bagalokot District Included) Gazetteer,2006, The Government of Karnataka,Bangalore. P-129

hill and built a new fort at southern hill in 1787 AD. As per a peace treaty signed with the Marathas, Badami went in the hands of Marathas. By 1800, the British had emerged as strong political power in India. With the deterioration in the Peshwa-British relations General Munroe with huge army attacked Badami, and took over it. Munroe next conquered northern parts of river Krishna by 17th May 1818.⁸⁷ With that entire province of Bijapur and Bagalkote district were taken over by British. Narashima Dattatreya Pedkar revolted against British and declared himself as king. But very soon under the leadership of A. Bettington, Badami was recaptured under the British and the entire region came under the Bombay presidency.



⁸⁷ Ibid –p-136

EARLY FORTIFICATION: AIHOLE, BADAMI, PATTADAKAL, MAHAKUTA AND ALAMPUR

Aihole the early capital of Chalukyas is situated on the banks of the river Malaprabha in Hunagund Taluk of Bagalkot District in North Karnataka. As a cultural capital during the Western Chalukyan rule, Aihole occupied a unique place in the history of art and architecture. Today Aihole is a small village about 35 kms east of Badami. The word Aihole is said to have originated from the word Ayyavole, Arya – Volal (The valley of elders) or Aivalli. Its Sanskritized form is Aryapura. An interesting story is associated with the name of the place. Parashurama after avenging and killing all Kshatriyas, washed his blood stained axe in the Malaprabha River. It is said to have turned red causing them to exclaim “ai! ai! holi! (Ah the river). In the Malaprabha valley prehistoric sites ranging from Paleolithic period to Megalithic period are reported in and around Aihole. At the top of the Meguthi hill are found several dolmens of Megalithic period even today. The excavations at Aihole have revealed pre-Chalukyan brick structures datable to Satavahana period. (brick temple in Ambigerudi complex) ¹. Aihole, was the capital of Chalukyas prior to Pulakeshi-I (540 A.D.). The early rulers of Chalukyan dynasty have been mentioned in Mahakuta pillar inscription.² The inscription mentions Jayasimha (500-520 A.D.) as the first ruler followed by his son Ranaranga (520 to 540 A.D.). Probably these two rulers must have ruled from Aihole as Kadamba military officials³. Aihole was also a religious centre, a trading centre with trade guilds, and an educational centre. Aihole with over hundred

¹ See – New Light on Chalukyan Architecture, by Rao.S.R: 1978, New Light on Chalukya Architecture, The Chalukyas of Badami, (ed) by M.S.Nagaraja Rao, The Mythic Society, Bangalore. P273-275

² IA, Vol no XIX, PP 185 -186

³ Radelizze, Corol Elizabeth, 1981, Early Chalukya Sculpture, VOL – 1 New York University Press, New York. PP-18- 19

temples scattered in and around the village is popularly known as „the *Cradle of Indian temple Architecture*.’⁴, It was Pulakeshi-I who laid a strong foundation of the dynasty in sixth century AD with Vatapi or Badami as his capital.

The political stability, abundant material prosperity, combined with peaceful atmosphere and a high level of religious tolerance in the Chalukyan dominions hastened all round cultural development.

For the first time in South Indian context, there was a great spurt in the religious architecture, as seen in the rock cut and structural forms of architecture, experimentation in functionally viable and aesthetically appealing temple models was carried out in the four centers of architecture viz Aihole, Badami, Pattadakal and Mahakuta. Political stability necessitated fortifying the capital city for protection of civilian population, temples, treasury from external aggression.

Aihole Fort The stone fort of Aihole is roughly in a circle or oval shape in plan. The ruined remains indicate a massive structure built of rough, uneven and irregular blocks of red sand stone, measuring about 2-3 mts in some parts, and less than 2 mts in other parts. The fort had 3 gateways on the north, east and western directions. The Silpa Sastras opine that south is inauspicious as it is the Yamadikku (direction of Lord Yama).

In all probability this may have been the reason for there being no entrance on the south side. Around the fort are found Kottalagalu or bastion placed at regular intervals. The bastions add to the strength of the wall.

⁴Brown Percy: 1930 Indian Architecture (Buddhist & Hindu), by D.B Taraporevala Sons and Co. Pvt.Ltd. Warli, Bombay. P-74

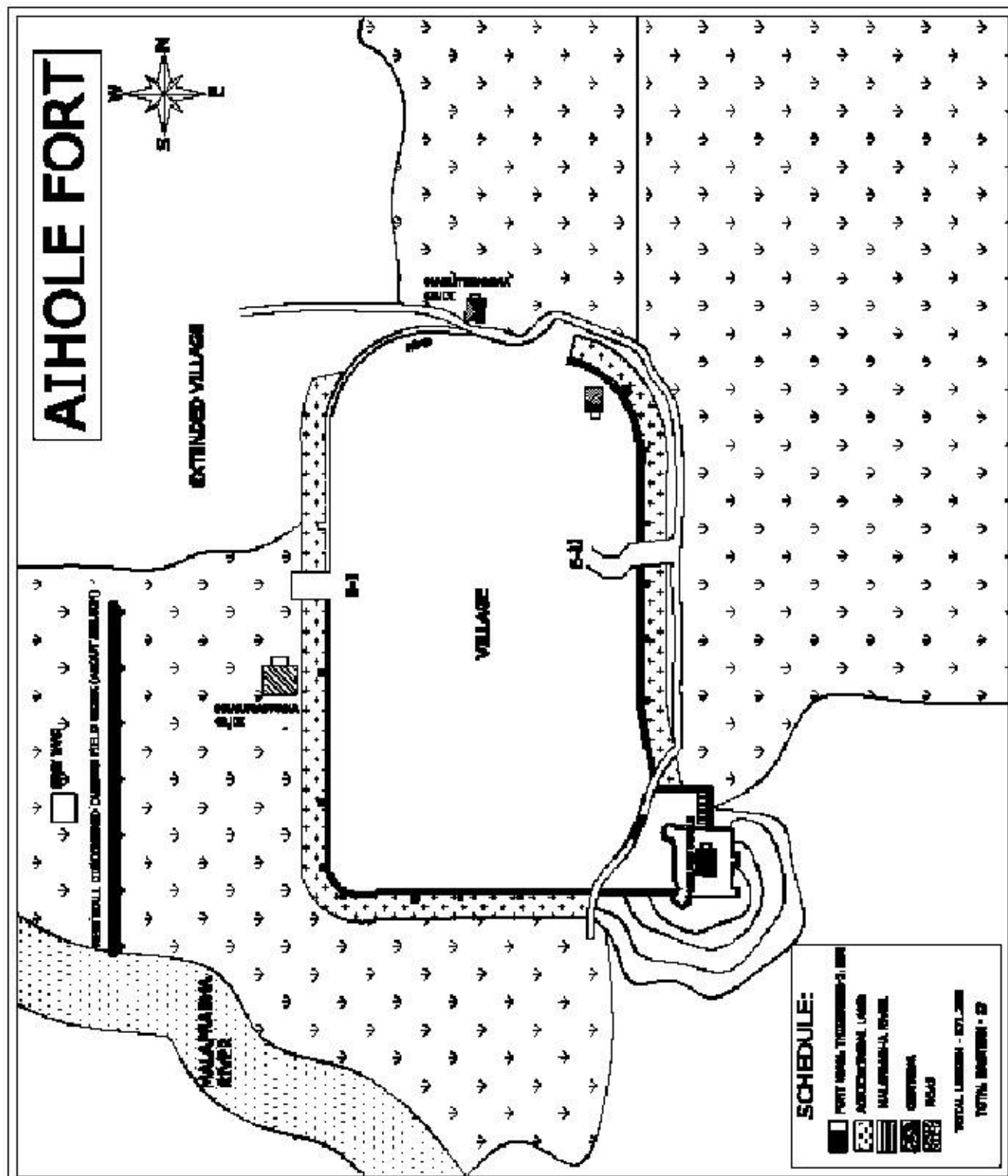


Fig. 4.1 : Map of Aihole Fort



Fig. 4.2: Satellite picture of Aihole Fortification around Meguthi Temple

Courtesy: www.googleearth.com

Basically a Neladurga, a part of the fort as the south east is attached to the hill lock and a fortified wall is raised around the Meguthi temple. There are no watch towers attached to the fort. In fact, the hillock itself acts as a natural watch-tower. The ancient fortification walls at Aihole may still be seen enclosing the town. There are gateways and rectangular bastions are of particular interest as they furnish one of the most complete examples of stone fortifications from this period. Both within and outside these fort walls are many temples belonging to various building phases. The fort has been built around 4-5 acres of land including Meguthi temple on hill top. The outer fort appears oval but northern part of fort is missing from northwestern direction up to the Durga temple. Within this fortified area are remains of ruined temples, fallen pieces of sculptures, walls, old buildings, showing evidence to the time of the capital of early Chalukyas.



Fig. 4.3 : Northern Gateway near Durga Temple



Fig. 4.4 : Eastern Gateway, Aihole Fort

The northern gateway is completely missing, with not even traces of northern entrance except for the fort wall. The gateway was probably near the Durga temple. The name given to the temple is also indicative of it being located with the gateway. However, it must have been near Durga temple. Today ASI gate is there.



Fig. 4.5 : Western Gateway, Aihole Fort

Another entrance found at the eastern part of the fort also is in ruins and has guardrooms on the either side. The gateway is little complicated in plan, and is not visible from main road. It is narrow and the path is zig-zag path leading to the village. Above the original gate wall small stones have been piled up, may be in the later period.

The third and the last entrance are at the western part of the fort, situated next to Hanumappana Gudi and this entrance has a narrow pathway and is simple in structure. It has been recently reconstructed by the Archeological survey of India.



Fig. 4.6 : Bastions of Aihole Fort

The study has traced the importance of the fort Bastions of the early period, where, the weapons like swords, bows and arrows were in use. The bastions are very simple and rectangular in shape. At some places, the stone slabs used vary in their size and shape. It is very surprising how these huge stone slabs were transferred till the fort area.

The study of walls point to reconstruction having taken place from time to time. Some parts of the wall have lengthy stone slabs while other parts have irregular shaped stones. The North West side of the fort is presently occupied by the locals both for habitation and agricultural purposes.



Fig. 4.7 : Fort walls of Aihole Fort

Leaving out the area under occupation the rest of the fort area measures 671.25 meters. In order to balance the horizontal and vertical slabs of stones the cyclopean method is adopted. This method was necessary especially as the stones being massive in size and in the absence of any mortar as binding material. The thickness of wall is 1.20 meters though in certain areas it is lesser.

The height of the wall varies from 8 mts. to 14 mts. Around the Meguthi temple, the height of the wall is about 6 meters. The width of the fort wall around the temple is about 2 to 3 meters, with rectangular Bastions.

The River Malaprabha is very close to the southern wall and it may have fed the fort with water. From the Durga temple to the Meguthi temple a wide road has been constructed and towards south and western part is agricultural lands and as at north and North West is the extension of the village, all of which could have obliterated the moat. Only fresh excavations will help in discovering the moat.

Megalithic tombs or dolmens have been found on the hill top near Meguthi temple, very few can be seen today, as majority of the dolmens have collapsed. The dolmens face all direction east, west, north and south. The height of the dolmens varies

from 1.00 to 1.3 mts . The dolmens have been place on the bed rock of the hill close to the Meguti temple.



Fig. 4.8 Dolmens near Meguthi temple at Aihole (6. a, b and c)

As it was an important economic centre, and one of the ancient towns, there may have been large sized houses with market places, cross roads, public squares, main roads with regular lines after shapes, audience hall and tanks. In the field study undertaken no civilian structures were identified. Large parts have been covered by residential areas with large structures. The Desai Wade is the only building which is largest in size belonging to family of Desais. It comprises of several rooms, with a large wooden doorway and wooden pillars.



Fig. 4.9 : View of Desai Wade at Aihole

Missing wall

As mentioned earlier the northern part of the fort is in ruins. Some parts of fort wall are found in the agricultural land of the Desai family which is completely covered under the soil.

It was during the field work a close observation in the fields revealed parts of the wall also covered under thick and thorny bushes. On clearing some of the bushes the parts of the ruined fort wall were discovered which stretched 600 meters upto the Malaprabha River.



Fig. 4.10 : Aerial View of Aihole

The Archaeological Survey of India, Dharwad circle, has in the recent years undertaken the task of rebuilding the ruined fort. On the completion of the reconstruction of the wall from Durga temple to the main road near Meguti temple, which comprises of the eastern wall, the work is under progress on the southern wall. Bastions are also being reconstructed by the ASI.



Fig. 4.11 : Tenegalu on the Aihole Fort Wall

“Tene” is basically an elevated stone slab on the fort wall. Near the western gateway names are engraved on some of the Tenes. Some of the names that can be identified even now are that of Benniya Shettiya, Iswhara Shettiya tene, Kahi Shettiya Tene, Marali Shettiya Tene; Kappara Dechi Shettiya Tene ; Mand Shettiya Tene ; Bachchara Tene, Agadiya Tene; Sangeeshwara Devara Tenakadavagila (Ba) Gadiya Tene ; Kantadida Mahadeshiyana ; Bhaskara Satra etc.⁵ The names which have been inscribed were probably of those who contributed to the construction of the fort and may have belonged to the nobility or rich trading community.

Among all the South Indian guilds the Ayyavole guild of the ninth and later centuries was the most famous. The earlier view about this guild was that it was a vast co-operation or federation of merchant guilds with its headquarters at Aihole and with its branches all over south India.

⁵ Annigeri.A.M: Aihole Samskruthi Mathu Kale, 1974, Kamataka University, Dharwad. P -5-6 and interview with Devarukondareddy on 24-03-2013 Bangalore also the field works study undertaken at fort area.

The Ayyavole 500 or Guild of Merchants suggests that the town was an important commercial center, even Pre- Chalukyan period and that Aiyavole 500 predates Chalukyas period.⁶



Fig. 4.12 : Viragals or in and around Aihole Fort

During the field study undertaken in and around Aihole about 27 Viragals were traced where many are in a highly ruined state. Parts of veeragals are missing, among them eight viragals are of artistic merit. These were all found near the Durga temple of which a few in broken conditions are placed next to the museum.

These viragals are about 5 to 6 feet in height and are divided into three panels. The reliefs in the lowest panel depicts the hero in combat, while the middle part portrays his ascent to paradise or swarga, and the upper most panel shows the Veera seated or standing beside a linga.

Based on the sculptures on these hero stones, are classified into 3 categories:

1. Gorakshana or hero dying while protecting cows- 08
2. Veeragals- Hero dying while combating -06
3. Miscellaneous – which are not clear or disfigured Veeragals- 13

⁶ Dikshit G.S. : (1978) Local Administration and guilds in Early Chalukyan Times, Mythic Society, Bangalore, P-24.

Further there is scope for finding out some more veetagals around Aihole and the surrounding areas.



Fig. 4.13 : Veeragal near Aihole Museum

The Aihole fort may have been built in sixth or seventh century AD. Both, within and outside fort walls are several temples belonging to various building phases. The remains of the ancient monuments Pre-Chalukyas and Chalukyas periods ascertain that it was an urban centre, economically and culturally significant.



Fig. 4.14 : Stone Slabs around Maruteshwara Temple, Aihole

BADAMI FORTIFICATION

The Chalukayas established the political power by overpowering the Kadambas and began to expand their territory. With the rise of Pulikeshi-I, Badami became the capital of the Chalukayas. The significance the city can be understood in Ptolemy's „Guide to Geography.“⁷



Fig. 4.15 Satellite view of Badami Town

Courtesy: googleearth.com

It was Pulakeshi-I who took up the task of constructing a Giridurga at Badami and establishing it as his Capital.⁸ An inscription engraved on a cliff in the North Fort at Badami, refers to King “Calikya Vallabheshvara” who had performed the

⁷ Note- *Badiamaioi*: - There is in the district of Belgaum a town and hill fort on the route from Kaladgi to Balari, not far from the Malpraha, a tributary of the Krishna, called Badami, and here we may locate Badiamaioi.

⁸ DARKRBP, 1940-41, PP-6-10 AND EI, Vol no XXVII, PP 4-9

Asvamedha and other sacrifices conforming to the Srauta prescription and who had been of Hiranyagarbha rite⁹. He is stated to have made the hill fort or Giridurga at Vatapi, a fort invincible from below as well as above¹⁰.

On the same hill, is an inscription of Pulakeshi which is located in the middle of a vertically steep side. It was discovered by R.S. Panchamukhi in 1940. This inscription is important for two reasons. It mentions the date in the first line as unlike 465 Saka era i.e., 543 AD. Besides, mention is also made of the fort being unconquerable from both from top and bottom.

The fort wall was raised along the edge of the flat surface of the high hill. As a result the plan of the fort is irregularly many-sided or polygonal. The fort site is strategically located along the Kalatgi hill range. Pulakeshi-I may have selected this Northern hill, because of availability of water resources here. He is said to have constructed a large tank which has filled with rain water flowing down the hill which today is called as Agastya Tirtha. The Tirtha is still in much use by locals for domestic purpose throughout the year.

The Northern hill is also known as Bhavan Bande. The top of the summit is intensively flat and is not easily accessible, because of many natural passages between huge boulders there. The fort wall has been built along the edge of the flat surface of the hill, which rises 300 feet above Badami. To reach the summit from western side one has to pass through five gateways.

⁹ Ramesh K.V: Chalukyas of Vatapi, (1984): Agam Kala Prakshan, New Delhi. P-84

¹⁰Ibid

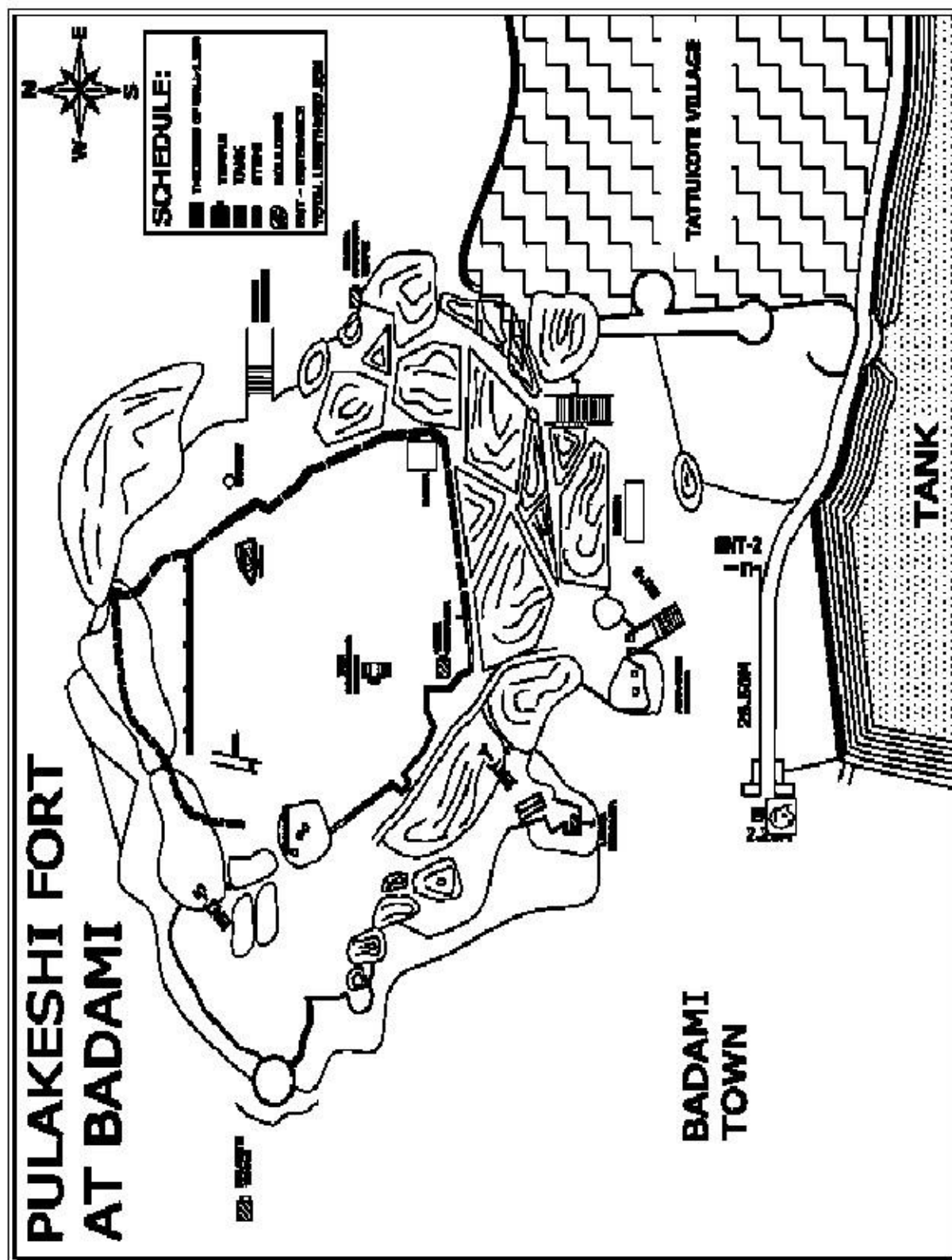


Fig. 4.16 : Pulakeshi Fort at Badami



Fig. 4.17 : Gateway No.1, Pulakeshi Fort, Badami

The first gateway facing west is located between boulders, and is very close to the Agastya tank at the foot hill. It is very simple in plan. With columns on either side, and above the lintel are brackets supporting the parapet. The Dwarapala figures which are of moderate size are disfigured. On the platform on the inside of the fort are sculpted panels of Kubjaganas in dancing postures and holding on to musical instruments.

The gateway of the entrance no 1 clearly indicates that the rulers and other dignitaries were within the fort, separated from the city proper.¹¹ The hill fort may have served as a citadel, which was separated from Badami town¹². On close observance of

¹¹ Joshi.S.K: Defence Architecture in Early Kamataka (1985), Sandeep Prakashan, New Delhi P -59

¹² Ibid ;

the gateway indicates several changes which the fort has undergone through the ages.

The gateway may have had a wooden door.



Fig. 4.18 : Gate Way No.2, Pulakeshi Fort, Badami

The entrance no 2 is situated about 26.5 meter from first entrance. This gateway faces east. Next to the museum on one side it connects the northern boulder. Inside there it opens to a small courtyard. Slanting flight of steps leads to entrance no 3. (as seen in fig no.4.19)



Fig. 4.19 Gate way no 3 of Pulakeshi Fort, Badami

Gateway 3, which leads to the actual citadel or the fortress, facing Agastya tirtha which is small in size, over the entrance may be seen as a modification. Later period Loophole is cutout on the upper part. This entrance has two guardrooms on either side. The portico of the sentry room or guard room is not in alignment with the walls. Below the guard room, are ganas sculpted in various forms, on both sides of the Guardroom.

On the right side of the interior of the guard room is a Mithuna sculpture, which must have been used for holding an oil torch for purpose of light and this is evidenced by the dark patches on the ceiling of the guardroom. Further up is gateway 4 which leads to a narrow passage where cliff inscription of Pulakeshi-I is found.



Fig. 4.20 Akka Tangi Mantapa, Northern Hill, Badami

About 50 meters away from the third entrance is a very narrow and a tapered passage less than 2 – 3 feet between irregular boulders leading to an open or flat area of the hill. Constructed here are the two pillared mantapas which may have served as watch towers. Locally the mantapas are popularly called as the *Akka Tangi Mantapas*.



Fig. 4.21 Gate way no 4 of Pulakeshi Fort, Badami

Gateway no: 4 are more decorative having two Saiva Dwarapalas on the eitherside. Some parts of this slab have been disfigured, and on the top right corner is a sculpted panel which is square in shape. While Dwarapalakas are of an earlier period, the portion above the lintel appears to have been reconstructed in the medieval times. Outside the gateway about 50 feet further are two natural passages, the one on the left leads to lower Shivalaya while the west path leads to the steep edge of the hill.



**Fig. 4.22 Gate way no 5 of
Pulakeshi Fort, Badami**

From this edge one will be able to have a commanding view of Melegitti Shivalaya at the lower part of same northern hill.

Gateway no: 5 are located on the western side of the hill. The gateway is the smallest and the most simple among the gateways. On the extreme eastern side of the northern hill may have been a pathway leading to Mahakuta. But the whole structure appears to be destroyed and fallen into the valley.



(a) Mud fort with big loophole



(b) Mud Fort with loophole



(c) Wall built with mortar.



(d) Wall built with mortar with big Blocks

Fig. 4.23 : Various Types of Fort Wall of Northern Hill (a b, c, d)

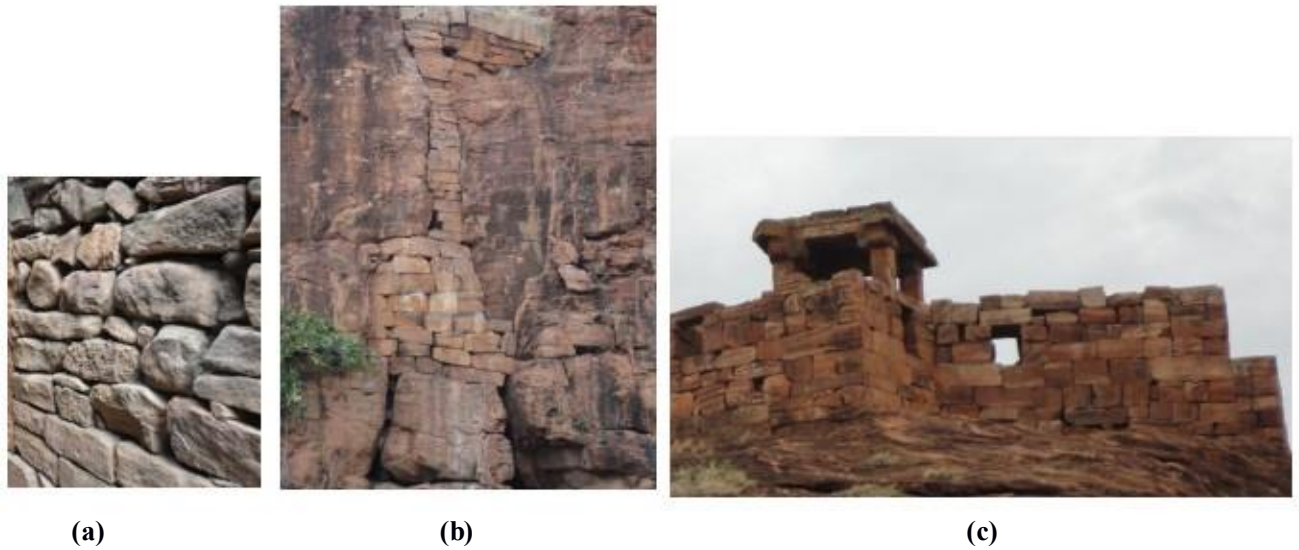


Fig. 4.24 : Cyclopean masonry (a,b,c)

Gaps between big boulders were filled by piling up stones. As it is a Giriduga or hill fort, the earliest fort of the province, the pattern of building the wall is totally different. On the northern hill, the study has traced 3 to 4 types of walls. Mud Fort wall was built with mortar Cyclopean masonry and Gaps between big boulders filled by piling up stones. These patterns belong to different periods i.e., 6th to 18th Century.

The earlier wall was constructed during the period of Pulakeshi-I on northern hill. Many Huge boulders and rocks were connected by filling these gaps. This shows very competent and skillful engineers and architect's workmanship,

1. Building materials are naturally available,
2. They will take less time.
3. Only minimum fortification is required.

The Fort wall around the edges of northern hill is simple in structure and remains of the northern wall may still be seen. Towards the eastern direction as no wall is to be found, in all probability the wall may have collapsed. As per the remains the entire length of the fort as measured is 937.50 meters with the wall being 1.20 thick.



Fig. 4.25 : Fort Wall near Northern Side of Bhavana Bande, Badami

On the southern side of the hill fort i.e., from the Dargah to upper Shivalaya the wall has collapsed totally with no traces.

At the base of the northern hill fort, towards the eastern side, a fort wall about 4 meters in height stretches from Kileda Hanumappana Gudi to the Kalatgi hill range. The rugged pathway connects Mahakuta. In all probability it may have been a secret passage linking Badami with Mahakuta.¹³

The fort constructed by Pulikeshi-I is irregular and polygonal in shape. This 1500 years old fort was reconstructed several times by the succeeding powers that established control over Badami and made it an important centre, politically and for purpose of military. Along this old fort, new forts were also erected from time to time which displays the changing pattern in defence technology.

A very important and essential element within the fort was the water tank found on the top of the hill. The tank is rather large which may have been dug up when the fort was constructed by Pulakeshi-I. Very steep and narrow steps are cut out to enter into the tank. Two more ponds on the eastern part of the fort are found both in different

¹³ Ibid; P-62

shapes. One is triangular in shape while the other is circular in shape. On the boulders adjacent to the triangular shaped tank are sculpted Sivalinga, a four handed figure which is unidentifiable besides Padukas of different sizes.

On the south western part of the fort is a Dargah, a small structure under a big banyan tree. Beside the Dargah is Shivappanavara gadugi or Samadhi, and one more Samadhi. Yet another tomb of a Muslim saint Madabi Raji Allah is built. These structures may have come up in the recent times.

A few more sculptures have been found on other parts of the fort walls, on the right side of the entrance no: I of the fort am found Ganesh and Mahishasuramardhini reliefs. Sheelakanth Pattar opines that they are of Rashtrakuta times. At the entrance of gateway no:3 are relief sculptures of Veerabhadra and Hanuman, - the protective deities. Attached to the wall are gaurdgooms. In the interior of the right side guardroom is a mithuna sculpted relief.



Fig. 4.26 : Fort Wall of Pulakeshi-I

At the entrance no:4 are Saiva Dwarapalas and right side corner is a niche cut into the rock and within it is a figure of a King in a seated posture with musical instruments, dancing postures, wrestling and fighting. On the boulders inside the fort

are markings on the boulders which have been discerned by scholars as attenders/workers/artists. A few viragals have also been found within the fortified area, beside the Khilleda Hanumappana gudi, a few sculptures of Hanuman Kaliya Mardhana Krishna have been found.



Fig.4. 27 : Triangular Tank on Nothern Hill, Badami



(a)



(b)



(b)



(d)

Fig 4.28 :The God and Goddesses next to Triangular Water Tank, Badami



Fig 4.29 : The Darga of recent times on the Northern Hill, Badami



Fig 4.30 : Ganesha and Mahishasuramardini Sculpture of Rastrakuta Period

On leftside of Gateway No.1

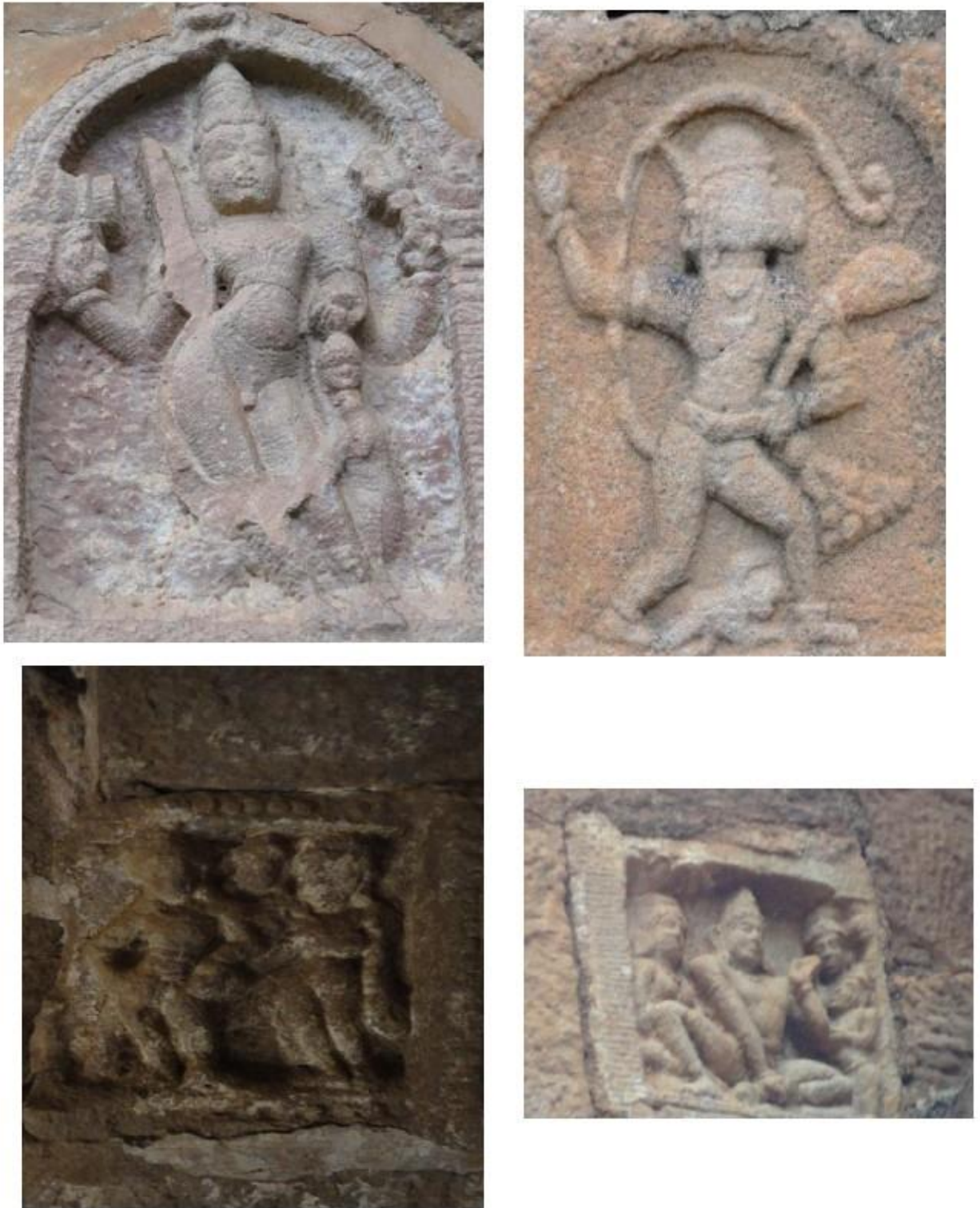


Fig 4.31: Small sculpture on the fort wall, boulders, near gate ways, within guard room.



Fig. 4.32: Fighting Ganas



Fig. 4.33 Ganas playing musical

instruments



Fig. 4.34 : Dancing ganas



Fig.4.35: Restling ganas.



Fig. 4.36 : Dwarapalakas on 4th Gateway



Fig. 4.37 Attendance marking on the boulders

Some sculptures names, and other minor sculptures are also found with in fort area which enhanced the beauty of fort, and gives a royal look to the ancient fort of Pulakeshi.

Tracing palace area

Within this fort of northern hill on the eastern side is a flat area which was probably the palace area. Going by the painting in Cave no-III at Badami, there may have been the palace made probably of wood and brick, hence no traces are available.

This may have been the palace area for four reasons, Firstly, the area is very flat and on the rock bed there are few stone grinders, on the northern side are stone steps which are clearly visible on surface area. Secondly, it has water bodies with a few sculptures of gods and goddess and padukas already mentioned. Thirdly during the field study some pottery and remains of brick structures were found. Archeologists who were consulted about pottery remains suggested that the red ware pottery may be of early

sixth and seventh century A.D and certain other pottery remains to a later period, probably from 9th to 14th century A.D. There are no evidences, inscriptional or otherwise to establish that the immediate successors of Pulakeshi I had renovated or reconstructed the forts. Neither there are any traces of a new fortification undertaken by the Chalukyas after Pulakeshi I. Existing evidences point to only the later dynasties that of Rashtrakutas, Vijayanagar and finally Tipu having taken to construction of new forts as well as renovation and reconstruction. The same has been established by satellite pictures captured during the field study.

PATTADAKAL CIVIL FORTIFICATION-

The ancient Pattada kisuvolal or Raktapura or Pattadakal in Bagalakot district was another important centre of the Badami Chalukyas. The place became renowned for the coronation ceremonies for the kings conducted here, evident by the name of the place.

The group of monuments in Pattadakal designated under UNESCO World Heritage list, in 1987, has Hindu as well as Jaina monuments. A remarkable blend of the three temple styles. The art and architecture of the temples bears witness to the patronage of the Early Chalukya kings and their queens.

Several remains at Pattadakhil indicate it being as important site in the Pre-historic period. A few human settlements and dolmens of Pre-historic period have been traced about two Kilometers away from Pattadakal. A Sundara has discovered about 20 dolmens of Port – here and passage chambers.¹⁴

¹⁴ Sundara. A: Pattadakallina Chalukya porvakalada Ondu Ittige Kattada. (Badami Chaalukyaru Lekhn a Samputa, Chief Editor Dr. A Murigeppa)Prasaranga, Kannada University, Hampi. PP-419-423

Early Historic period excavations in front of Sangameshwara temple has revealed a foundation of a brick Sabha Matapa and excavations near Galaganatha temple has provided pottery of Satavahana period. Thus it is evident that from Pre-historic Period, Pattadakal was a prominent place. Senior Archeologist S.K Joshi has identified a civil fort at Pattadakal. He holds the view that it is first of its kind in South India.

A Neladurga without bastions was erected around the settlement area covering the temple area. There are more than ten temples in Pattadakal-Virupaksha, Jambulinga, Papanatha temple, Kashi Vishwanatha, Mallikarjuna, Someshwara, Chandra Shekara, Galagantha, and Kadu Siddeshwara temples. To protect these temples and subjects, the fort has been raised in a rectangular shape.

The fort now is totally ruined and few remains of the fort wall are found next to Virupaksha Temple, which further extends to Papanatha Temple that is the eastern wall. The Southern wall stretches from Lakshmanavvanagudi and from Lakshmanavvana Gudi up to Tayavva gudi.

From the western wall the total length of the fortification traced during field work is 387 mtrs. The traces are not available after Tayavvanagudi. Several houses have been constructed on the foundations of the fort wall. In one of the houses attached to the fort wall is a sculpted relief of four armed Vishnu on Garuda. The figure has a highly decorative prabhavali. The neighbours of the family informed that another relief of Lakshmi Devi was kept within the house. Despite requests we were not allowed into the interiors of the household.



Fig.4.38: Four Handed Vishnu on Garuda, Pattadakal Fort Wall



Fig.4.39: Sculptured Relief on the Fort Wall of Pattadakal

On the same line on the outer lower wall of the fort is a sculpture which has king seated gracefully on the throne. Dancing figures and musicians may also be seen. Parts of sculpture are destroyed hence the sculptures are not identifiable.



Fig.4.40: Fort wall on the bank of Malaprabha, Pattadakal



Fig. 4.41 Fort wall near Virupaksha Temple, Pattadakal



Fig. 4.42 Encroachments on Fort Walls, Pattadakal

Besides the three places discussed above, of the period of the Chalukyas, two more sites Mahakuta and Alampur of early Chalkukyan period are also important.

MAHAKUTA FORTIFICATION

Mahakuta, about 15 kms from Badami by road, is a well-known ancient religious centre Mangalesha's pillar inscription speaks of Mahakuta where his forefathers performed religious duties. It was an important centre for the Kalamukhas, Kapalikas. Remains of brick structures around Banantigudi indicate that they are pre-Chalukya. Under the Chalukyas a large number of temples were constructed and a fortification was raised around the cluster of temples. The fort wall measures 267.5 meters and the thickness of the wall is 1.50 meters. The rectangle fortified wall is the smallest among the fortifications under taken by the Chalukyas.

The northern wall measures 41.20 meters, the southern wall measures 44.45 meters, the eastern wall 91.8 meters and the western wall 86.00 meters. Three

entrances are provided, one on the northern and two on the eastern sides. In the middle of the fortified enclosure is a pushkarni known as Vishnu Pushkarni. On the north western side is the kitchen area having a pillarad corridor with two small shrines in between. The wall has bastions attached which speak of the wall serving the purpose of protection of the temples rather than defence.

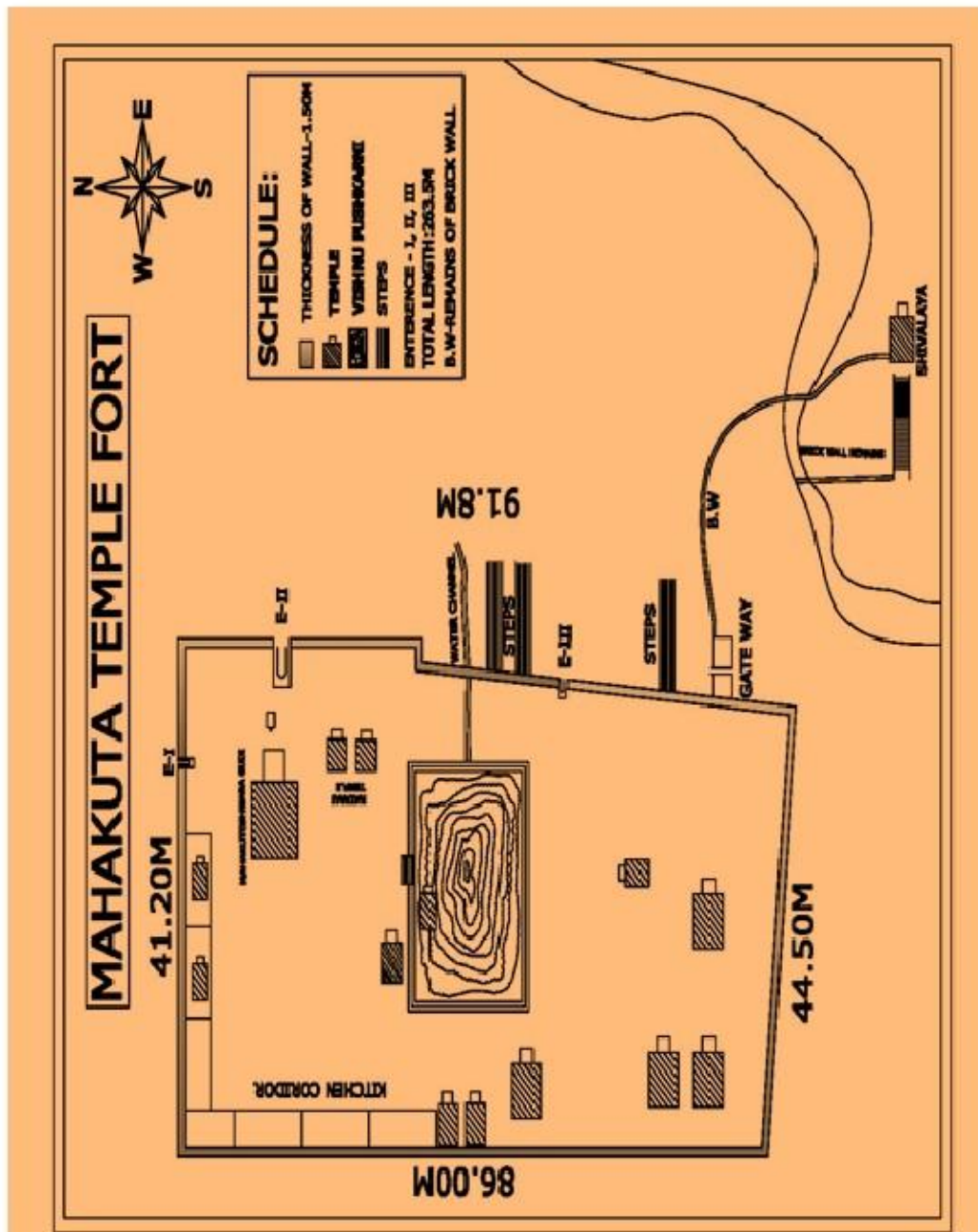


Fig.4.43 : Mahakuta Fortification Area



Fig. 4.44 : Mahakuta Temple Wall



Fig. 4.45 Vishnu Pushkarini of

Mahakuta



Fig. 4.46: Mahatma Temple inside Fort



Fig.4.47: Gateway outside the Makutaya



Fig. 4.48 Mahakuta Temples

Inside Fort



Fig. 4.49 Gateway No.2, Mahakuta



Fig.4.50 Kitchen corridor within Fort



**Fig.4.51 Skeleton Dwarapalakas on
The Gateway outside the Fort**

ALAMPUR FORTIFICATION:-

Alampur is a temple-town situated in Mahbubnagar district in the state of Telangana.

Alampur is the meeting point of the sacred rivers Tungabhadra and Krishna and is referred to as Dakshina Kashi and also known as Navabrahmeshwara Thirtha.

It was an important cultural centre of the Badami Chalukyas. An inscription of Vijayaditya,¹⁵ the Badami Chalukyan ruler, says the fort is a massive structure located the South Bank of Tungabhadra. The eastern wall of the fort is 1100.00 meters, the western wall is 950.00 meters, the northern wall 550.00 meters and the southern wall 510.00 meters. The bastions are large and rectangular in shape as at Aihole. The temple complex is located within the fort. Two gateways have been provided one on the northern and the other on the western side.

¹⁵ EI. VOL. NO. XXXV. PP.121-124

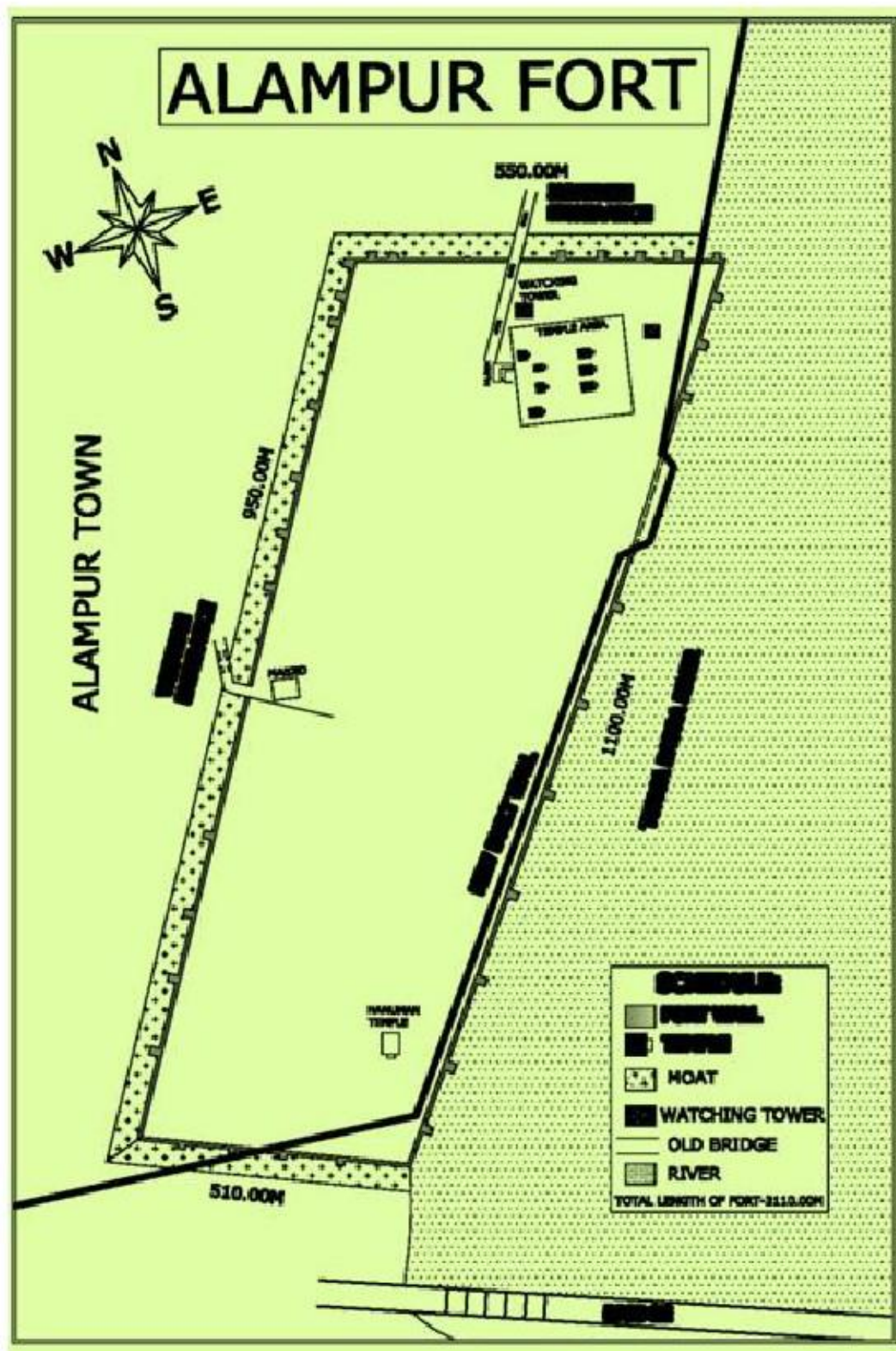


Fig.4.52 Alampur Town Map



Fig.4.53 : . Gateway of Alampur Fort



Fig.4.54 : Ruined Bastion on Tungabhadra Bank



Fig. 4.55: Temple Complex within Alampur Fort



Fig. 4.56 :Ruined Bastion of Alampur Fort



Fig.4.57: Ruined Bastion of Alampur Fort on the bank of Thungabhadra River

The eastern wall which is on the banks of the river has collapsed due to flooding of the river; hence a new wall has been erected recently to protect the monuments inside the fort.

□□□□□

THE FORTS OF LATER PERIOD

(11TH TO 18TH CENTURY A.D.)

The Rastrakutas, who succeeded the early Chalukyas of Badami in establishing political sway over the Deccan founded their capital initially at Pratisthanapura (Paithan, now in Maharashtra) and later at Manyakheta i.e. Malkhed, Chitapur Taluk in the Gulbarga District of Karnataka. Their territories were spread over Kannada, Marathi and Andhra provinces. Having emerged as a strong power, the Rashtrakutas especially Dhruva, Amoghavarsha and Krishna –II extended their territories upto the northern regions and down south upto Cauvery. It is said that the horses of the Rastrakuta warriors mostly used to gulp the waters of the Ganga and the Yamuna.¹ The Rashtrakutas were the first to indisputably officially declare their empire as Rastrakuta i.e. the comity of nations – historical fact of the beginning of nation or Rastra².

With Amoghavarsha I (818 -878) further strengthening the Rashtrakuta stronghold at Malkhed on the left Bank of the River Kagina, he also employed masons and craftsmen knowledgeable in defence architectural technique as well as those well versed in carving out the massive rock cut temple like the Kailasanath temple at Ellora and the marvelous Mahesha murty at Elephanta.

The Rastrakuta kings Krishna I (765 -774 A.D.) ; Dhruva (c. 780-793 A.D.); Govinda –III (793-814 A.D.), Amoghavarsha –I(814-8) ; Indra- III (914-929 A.D.) ; Krishna –III(c.939-967 A.D.); , and the later kings administered their territory from the

¹ Alterkar Anant Sadashiv (1967) Rashtrakutas and Their Times, Oriental Book Agency, Poona. P -4

² Joshi. S.K □ (1985) Defence Architecture in Early Karnataka, Sandeep Prakashan, New Delhi. P-24

Malkhed fort. Amoghavarsha-I was particularly responsible for enlarging, beautifying and modifying the large fort of Malked. The empire declined from the time of Karka – II (972-973 A.D.) as the Later Chalukyas headed by Taila-I (973 A.D. to 997 A.D.) emerged powerful by overthrowing the Rastrakutas and founding their capital at Kalyana.

Prior to the Rashtrakutas establishing their hold over Badami, as already discussed, a fort had been constructed by Pulakehsi- I on the northern hill popularly known as Bhavan Bande.

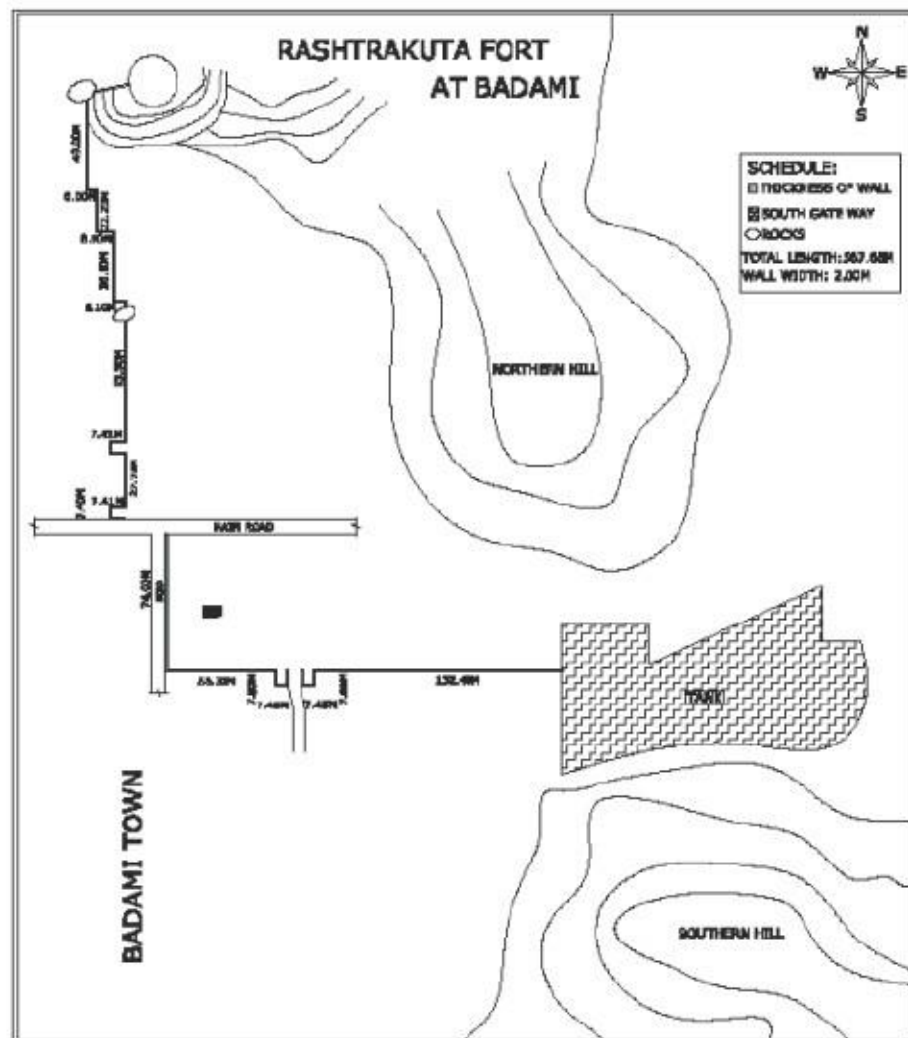


Fig.5.1 – Rastrakuta Fort at Badami

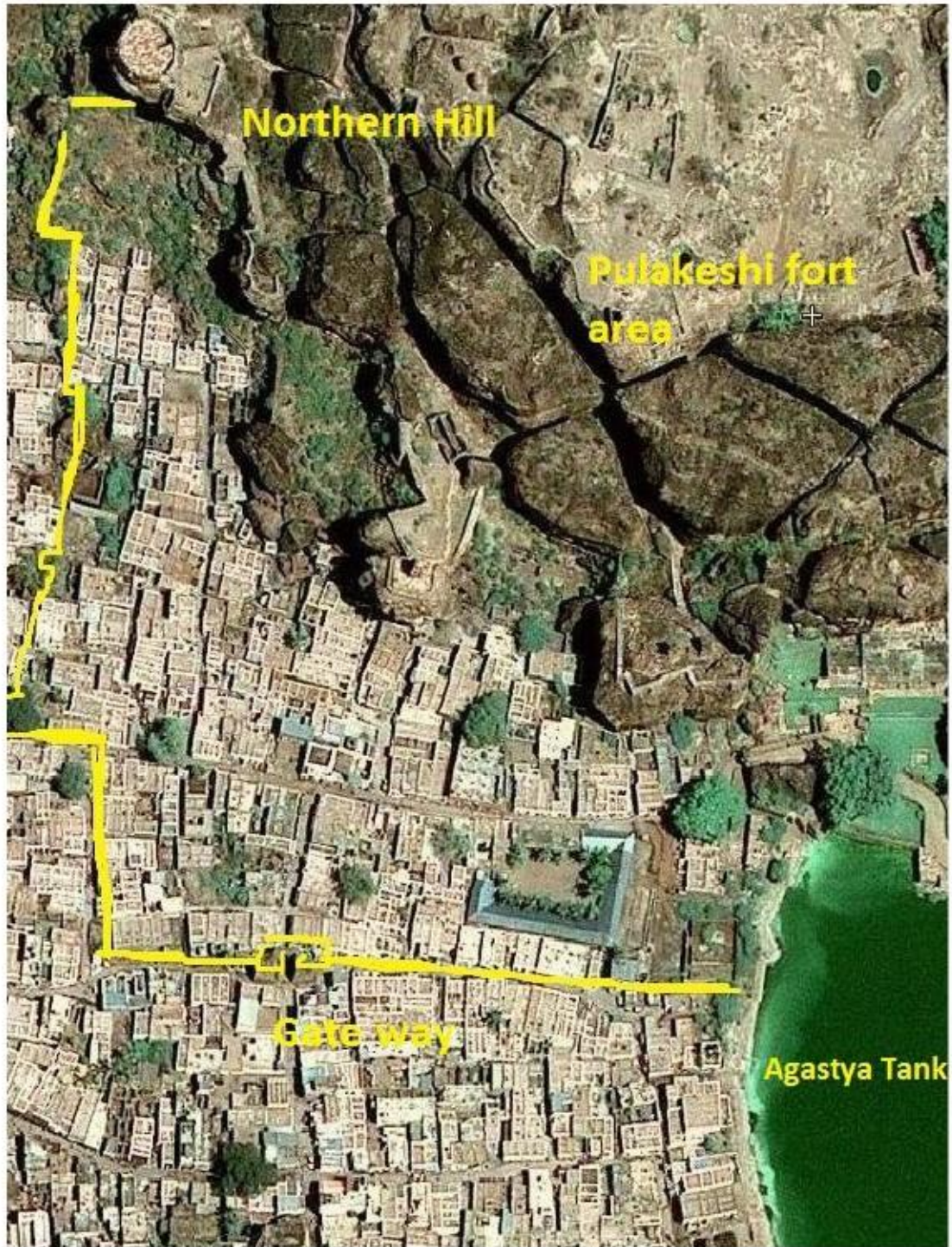


Fig. 5.2 : Satellite picture of Rastrakuta fort at Badami connecting Agastya Tirtha and northern hill.

Courtesy: google earth .com

Besides, the existing fort of the Chalukyas of Badami, a new fort was constructed by the Rastrakutas at the bottom of the northern hill. In all probability Pulakehi fort might have been weakened by tenth century, and population of Badami town may have multiplied, which may have compelled the Rashtrakutas to provide further protection. The new fort may have been erected by a local administrator at the behest of Rastrakuta kings.

About five inscriptions of the Rastrakuta period have been discovered at Aihole and Badami. The inscription found at the Ladkhan temple at Aihole makes a mention of Krishna –II.³ The inscription further mentions that a certain Suryakartha Bhatarā and Balakartha Bhatarā spent the Chturamasa at the temple⁴. It is unclear as to who the dignitaries were while the Hucchimalli temple inscription refers Kottiga.⁵ Besides an inscription found at Badami region speaks of Kalliballanu having ruled over this region.

An inscription on a viragal which was found in front of the Hucchimalligudi speaks of Akkalavarshadavanu⁶ According to Padigar; Govinda figuring in the Aihole inscription of Pulakeshi II ⁷ has been identified generally as a Rashtrakuta chief ruling in the region north of the Bhima River.⁸ The above inscriptions show the political control Rashtrakutas held over Badami and the surrounding provinces, especially during the time of Krishna II, Kottiga, and Amoghavarsha and may be of the later kings as well. However, none of the inscription speaks of the construction of the fort by the Rastrakutas. Architectural characteristics point to the fort having been erected during

³ IA. Vol- no IX, P-74

⁴ Ibid; P-74-75

⁵ Pattar Sheelakanth (2000): Badami Samskruthi Adhyana, Prasaraṅga, Kannada University, Vidayaranya, Hampi. P-24

⁶ Annigeri. A.M, PP.Op.cit p.160

⁷ IA. Vol no V, PP- 67-68

⁸ Padigar, V. Srinivas (Ed): Inscription of the Chalukyas of Badami (543-757 A.D) 2010, Indian Council of Historical Research. New Delhi. Plate No. –L VII

the reign of the Rastrakutas.⁹ The fort, a Neladurga measures 567.68 meters in length from the Agastya Tirtha on the east to the northern hill on the northern end. The entire stretch of the new fortification undertaken by the Rashtrakutas is 'L' shaped. Presently the entire fort area is located in the middle of Badami town with residential encroachments, covering the entire area, both within and outside the fort wall. The pathway leading to the fort has become narrow while the bastion, the city gate, guardrooms are all in ruins. Large part of the walls has collapsed while rest of the walls has become the back walls of many of the houses.



[Fig. 5.3 – Rastrakuta Southern Gateway in the midst of Badami Town

Some parts of the fort area have become toilets and drainage area which did cause immense difficulty, in measuring the walls while surveying the area during

⁹Interaction with S.K Joshi (23 December 2011) . Prof. Sheelakanth Pattar(15th October 2012)Prof. Srinivas Padigar, (July 17th 2009)

fieldwork. At regular intervals are rectangular bastions though a few have crumbled down of which only the bases are available.

There are no traces of moat around the fortified area, as it is entirely covered by dwellings of the densely populated town. In all probability the houses have been constructed over the moat, itself. The fort wall raised over the hill extending up to the northern hill is 120 meters.

On the southern side of the fort is a gateway looking south towards Badami cave temples. The gateway is in the midst of Badami town, (see fig. 5.3) belongs to the period of the Rashtrakutas. The doorway columns is enclosed partly by the projecting walls on the sides, which act as ramparts, and on the either side of the gateway are two bastions with equal measurement of 7.80 length and 7.45 width in the interior. Adjacent to the bastions are a flight of steps to reach the top of the bastion which are slightly hidden and not clearly visible unless and until one gets closer to the back of the bastion.



**Fig.5.4- Rastrakuta bastion
at Badami**

The Western Gateway has totally collapsed with no traces of the gateway and is reduced to just a narrow road which leads to the museum (see Rastrakuta map). The gateway is located in a strategic position as it protected the entrance no.1 of Pulakeshi's fort. The wall pattern of the fort constructed by the Rastrakutas is comparatively well arranged with rectangular and square stone blocks held together with, though with clay binding but today hardly any clay is seen. The sides of the wall which are broad at the base taper towards the top. The lower part of the wall is four meters in width while it is two meters at the top. The height of the wall is six meters. Despite the wall being built strongly by filling it with clay and debris, large part of the fort walls have collapsed.

About 100 meters from the western wall is a temple which has been closed down by filling it with soil. Even the façade has been covered up. Concrete structures have been constructed attached to the side and back wall of the temple rendering the temple walls virtually invisible. The sikhara alone is partially seen. No attempt has been made by the civic or other bodies to retrieve the temple to its original form.

In as far as the engineering skill involved in the construction of the fort is concerned, compared to the earlier forts, the new fort of the Rastrakutas is massive in size. The stone blocks used are both of square and rectangular in shape. The locally available material, the red sand stone the locally available material is abundantly used.

VIJAYANAGARA FORT AT BADAMI

The rulers of Vijayanagar Empire Harihara-I, Sadashivaraya, and subordinate rulers have constructed and renovated the forts of Badami. It appears this might be northern most boundary of Vijayanagar as already as discussed under Vijayanagara also

Badami became an important centre. After the fortification undertaken by the Rashtrakutas, the next power to have taken to further strengthening of the existing forts by means of renovation and as well as adding on additional forts at Badami was Vijayanagara. A fortification covering the earlier forts came in for construction during the reign of Hari Hara-I in the year 1339-40¹⁰ this fort connects Batterappana gudi, near the Kappe Arabattana inscription on the northern part of Agastya Tirtha. The bastion added by Harihara - I is circular in shape, and this appears to have been renovated by Tipu Sultan which is evident in the architectural pattern and mortar. Another fort connecting the northern hill with the southern hill was erected during the reign of Sadashivaraya. Major part of the fort wall rests on the bund of the Agastya Tirtha which is actually located between the two hills. (See illustration of the fortified wall across the Agastya Tirtha.) Yet another fort was constructed during the period of Achyuta Raya. The fort is much more elaborate.



Fig. 5.5 : The Ruins of Vijayanagar Fort at Badami

The wall commences from vicinity of the Malagitti Shivalaya on the western side of the northern hill and extends up to the western part of the southern hill (now

¹⁰ IA, Vol no X, pp -62-64

beside the security guard room of the A.S.I). Four inscriptions of the period all found at Badami mention building of the forts as well as reconstruction and renovation activities. Names of Harihara-I, Sadashivaraya, and Achyutaraya as well as their subordinate Krishnappa Nayaka and Kondaraja are mentioned along with the task undertaken by each of them.



Fig.5.6: Ruins of Vijayanagara Fort at Badami

Badami witnesses defence architectural building activity from 6th century to 18th century, at the same time even reconstruction and renovation work were undertaken from time to time according to requirements. Such of the acts are well evidenced in the inscriptions. An inscription present in the Bijapur Archeological museum, states that Achyutaraya sent his army chiefs, Channappanayaka and his son to renovate temples and the fort at Badami¹¹

Tracing the moat is a very difficult task. Due to expansion, in the Badami town entire moat around the fort wall has been destroyed. Originally the moat around the fort covered entire Badami town from northern hill and connecting with the southern hill, (fig. 3) measuring 1175M, single stretch, is almost a straight line, the exterior side at regular intervals has circular bastions. The method adopted in the constructions of the

¹¹ SHI, Vol no- XVIII P- 282-283

moat is unclear as the entire stretch has been encroached upon from time to time.

Present Badami has grown beyond this moat, and with the growth of the township, since a few decades almost the whole fort wall has been demolished. Even the moat has been filled up in the northern part. In the southern part the entire, Moat has become the main drainage. About four years back when field work was undertaken for the study of moat wall near by Dr Ambedkar circle, upto Hanunam temple was identified, but even that is covered by concrete wall built by Badami municipality.

The moat excavated during the Vijayanagar period has been filled up and has become main road connecting Badami with the Banashakari temple which is 5 km away. The elevated wall erected during the period of Achutaraya is totally destroyed except the wall found near Chavadi (village council hall). During the field work the wall was traced at the back of Krishna gudi and right side of Hanumappana gudi. Close observation shows these stone blocks were in fine rectangular shape and moderately small and varying measurement. The pattern in which the stone blocks have been arranged in the construction of walls speaks of it belonging to the Vijayanagara period. A study of the Vijayanagara fort indicates that the fort enclosed not only the area of the administrative units but also the whole Badami town.

One more stretch of the Vijayanagara fort can be seen as on the western side of the deep valley forming the large Agastya tank. The fort wall which is in single line, connecting the northern hill and stretching towards the southern hill (see fig 4) has a gateway towards the middle, but rather nearer to the northern end. This road leads to southern gateway erected during the rule of the Rashtrakutas. This is diagonally opposite to entrance- I of the northern fort.

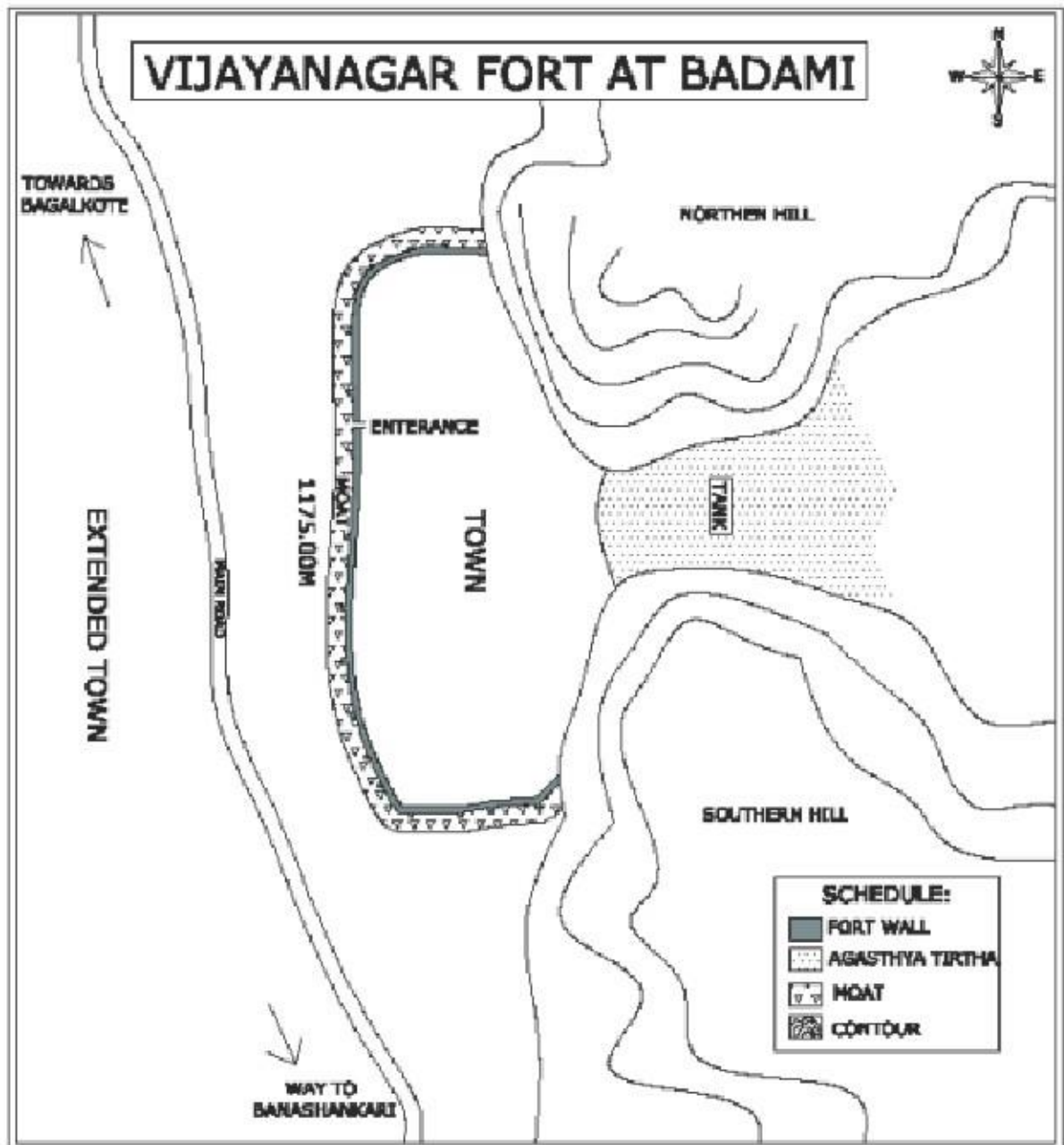


Fig.5.8. Vijayanagra fort connecting northern and southern hill

Bastions of Vijayanagar period were mostly in circular shape has seen in the few remains near Ranamandala hill on southern side which is in a ruined state .Provision was made for placing guns and loophole within the forts which were introduced for the first time at Badami.

TIPU FORT AT BADAMI

Hyder Ali conquered Badami fort in 1776¹² and it continued to be important stronghold under Tipu till 1786 where after it was surrendered to Nizams and Pashwa. Badami was the northern centre for his administration.



Fig.5.9. Tipu fort on the Ranamandala hill above Badami cave temples.

\ Tipu took to rebuilding and reconstruction of fort on the Northern hill and even a new fort at southern hill that is Ranamandala Hill above caves was added. The fort of Tipu at Badami was the strongest in comparison to the preceding ones at Badami.



Fig.5.10: Rocket launching of Tipu period

Courtesy: Ali Sheik Ali (2014) Tipu Sultan a Crusader for Change. Karnataka Gazetteer Dept., Bangalore P-56

¹² Bakshi S.R: (1991): Early Aryans to Swaraj- Vol- I, Sarup & Sons Pvt. Ltd. New Delhi. PP-318-320



Fig.5.11: Bastion of Tipu Period at Badami

European arms and ammunitions were introduced in Mysore State for the first time. Factories were founded at Srirangapatana, Maddur, and Mysore.¹³ Taramandal Pets, the rocket manufacturing units were found in several places and Bangalore was one important centre.¹⁴ There was a significant advancement in rocket technology. Tipu a military genius knew the importance of modern weapons such as firearms. Fortified walls were strong and protected by battlements, bastions, water bodies, heavily guarded gateways and secret passage. At the centre of the fort is a tank, which is actually a depression in the rock. Around this is constructed a bund to form a water body.

Heavy bastions with space for placing cannons was provided besides loopholes cut into the wall curtains. For the movement of arms, ammunition and foot soldiers a walk path was provided for the first time in Badami alongside the parapet wall. The parapet wall has loopholes at intervals to fire at the enemy. The fort has four major circular bastions and three demi-bastions identified during the field study. However

¹³Ali Ali Sheik .B: 2012, Tipu Sultan – A Crusader for Change, Kamataka Gazetteer Department, Government of Karnataka Publication, Bangalore. PP-1-3

¹⁴ Ibid – P-2

S.K Joshi opines there were nine bastions.¹⁵ And comparison of the Badami fort of Tipu with that of the Devanahalli fort brings out several similarities be it in the construction pattern or for that matter the bastions, parapets and other features. At the eastern edge of the hill are traces of a wall, large parts of which have collapsed and fallen into the valley below. May be there were structures serving as a store house for arms and ammunitions, as well as army quarters. At the base of the hill fort is the Markaj Jama Masjid.

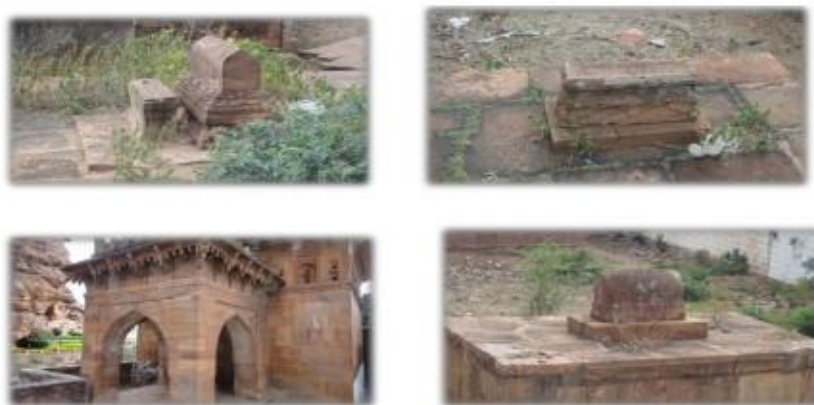


Fig. 5.12: Tombs of Tipu period at Badami

A few tombs are also found at the ground level. It was at Badami fort that Tipu had to confront the Nizam and the Peshwas in the twelve-month long battle during 1786 -87. The Badami fort was defended by the garrison of 3000 Mysore troops¹⁶. After a bitter battle the strong fort was later conquered by the allied army of the Nizam and the Marathas. It was on 21st May 1786 Hyder Baksh; the army commander of Tipu surrendered the fort.¹⁷

¹⁵ Joshi.S.K: Defence Architecture in Early Karnataka, 1985, Sandeep Prakashan, New Delhi., Fig no 22

¹⁶ Ali Sheik . B: 2012, Tipu Sultan – A Crusader for Change, Karnataka Gazetteer Department, Government of Karnataka Publication, Bangalore. PP- 68-69

¹⁷ Ibid;

A contemporary ballad entitled *Badami Kille Kedavida Pada*,¹⁸ speaks of Tipu referred to as *Dore* having taken nine years to construct a majestic fort at Badami involving 12000 laborers. He is said to have paid two annas cooli for the visually and differently abled and pregnant women and also, *daana* for the Brahmanas and Jangamas as well as Jagirs to the Khaji's, Mulla's and Fakirs. The ballad describes the fort as invincible, fitted with iron gateways, stationed with strong army, equipped with arms, cannons and ammunition. It further says that when demolished by the Peshwas and the Mughalai it sounded like thunder and lightening and appeared like a chariot without a kalasa. It further deplores that bad times had descended upon Badami which had rendered Karnataka destitute.¹⁹

On the northern hill Tipu renovated the existing fort and made several additions as per the requirements. In an attempt to strengthen the existing fort he reconstructed several parts of the old walls by using mortar in-between the stone blocks. Loopholes were cut into the walls for purpose of firing at the enemy as well as to observe the movements of the enemy. On the basis of the features of the gateway, it appears to have been renovated by Tipu.

A very large Bastion, circular in shape was constructed by Tipu. The diameter of the bastion in the interior measured 19.7 meters while the width of the wall which was also measured during the field work is 2.35 meters in width.

¹⁸ Murigeppa.A: 2009: Baadami Chaalukyaru Lekhna Samputa, Prasaraanga, Kannada Universtiy , Hampi PP-450-451

¹⁹ Ibid;



Fig.5.13: New bastion built on northern hill with magazine

The bastion reveals good engineering skill involved in its construction as seen in the size and its strategic location. Important is the bastions is constructed, on the edge of the hill from where the whole town could be sighted, and also the steepness prevented scaling the walls. While the exterior of the bastions is of stone, the interior is constructed of brick and mortar.



Fig.5.14: New bastion built on northern hill with magazine and interior of bastion of brick and mortar

The width of the steps varies from bottom to top. While at the base, it measures 7.60 meters. To the right of the steps is a deep chamber with pillars in the interior with a small circular opening at the rear end of the chamber.



Fig.5.15 : Underground magazine with foliated arches



Fig.5.16 : Underground magazine building with foliated arches



Fig.5.17: Parapet wall of Tipu fort on southern hill. Badami



Fig.5.18: Gaurd room Door ways of Tipu fort (Southern hill)



Fig.19.: Satellite picture of Tip fort with bastions

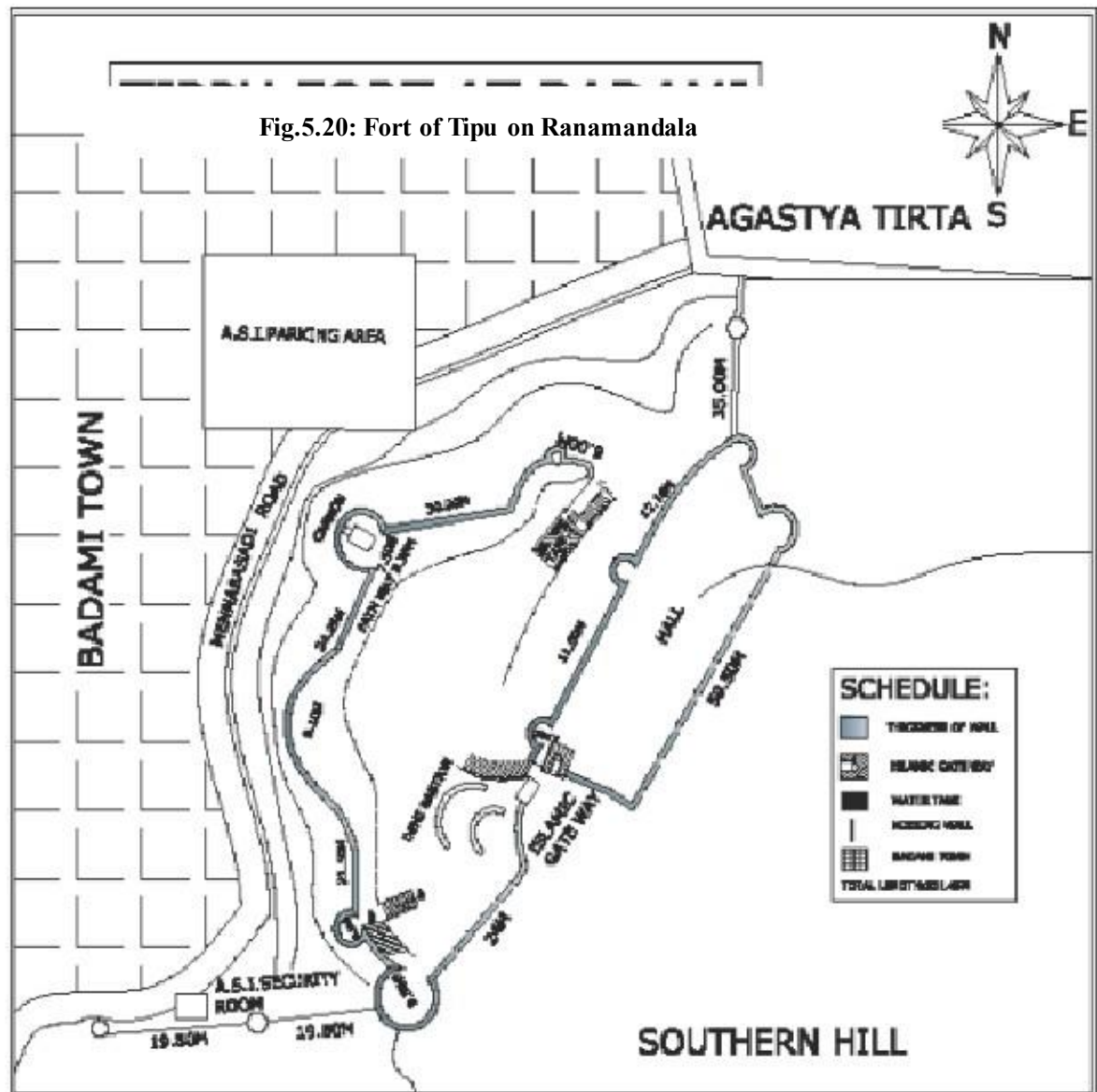




Fig.5.21 : Artist view of cannon firing during Tipu Period

On the top of the hill about 100 meters from the upper Shivalaya is a Magazine. Within the chamber are two underground cells used for storage of arms, ammunitions and gun powder. The magazine structure is rectangle in shape and the doorway as well as in the interior is foliated arches.

□□□□□

THE CHANGING PATTERNS IN DEFENCE TECHNOLOGY

In the study of the growth of defence architecture in the area under study, significant would be changing patterns of defence technology commencing from Pulakeshi-I to Tipu Sultan. More than other area, Badami emerged as an important centre primarily due to its strategic location. In the region Badami alone has tall hills and red sand stone which not only provided excellent material for defence architecture but also natural protection. Fort construction on the rugged hills commenced from 6th century A.D. and went upto 18th century A.D. Consequently they were different noticeable or distinctive developments.

THE FIRST STAGE (6 -8TH CENTURIES A.D)

The earliest fort architecture at Badami began during the reign of Pulakeshi-I. The fort at Aihole , Badami, Pattadakal, Mahakuta all belong to the early Calukyan period including one of Alampur which is presently in Andhra Pradesh. These have been discussed in the previous chapter.

By sixth century, the Badami Chalukyas on the decline of the Kadambas were able to establish political authority and extended their kingdom gradually over north Karnataka. With regard to the fort construction during the reign of Pulakeshi on the Northern Hill an inscription of 543 A.D.¹, describes the characteristics of the fort. It says

¹ KI. Vol no- II, no 2 Plate and PP- 6-7 and EI. Vol. no- XXVII PP-6-9

that the fort was in accessible both from the top and the bottom. The Northern Hill popularly known as Bhavan Bande measures 52 boulders. Being a military genius, Pulakeshi covered the gaps between the boulders especially at the base level by filling them with smaller stones. The cyclopean method that is adopted involved filling up the stones one over the other. A fortified wall came to be constructed only at the top level, which is a flat area. This method naturally involved minimum fortification effort. This early fort has five gateways all fixed during the period of Pulakeshi-I. While the interior of the fort appears to be of earlier period, the exterior portion of the gateways has been modified from time to time. A close observation indicates the whole of Badami northern hill is a cluster of boulders.



Fig. 6.1 Satellite Picture of Northern Fort

Courtesy: googleearth.com

The entire hillock with several narrow openings and smaller gaps is rather complex and makes it difficult to access. However, best advantage was taken of these to create secret passages which even an enemy on invasion would desist their advancement

The Chalukyan fort at Badami displays substantial advancement in the defence architecture. The very selection of the region or place for the construction of the fort on the steep sided hill top points is to make a considerable progress in war techniques. There is no evidence of a clear idea about the definite devices used. Nevertheless, the sculptural depictions on the walls of the temples, on the veergals, illustrate the range of weapons used in this phase.



Fig.6.2 : Weaponry as seen in the Sculpture of Chalukyas

The swords appear to be heavy and arrows look like spears may be effective even in striking, besides may be seen clubs, Shields and so on. Sheelakanth Pattar has identified five types of weapon based on the depictions in Chalukyan sculptures.

- 1.1 Shooting weapons - there are various types of bows of one bend , two curves and three curves;

- 1.2 Flinging weapons- Eeti or spear – long stick with sharp head;
- 1.3 Piercing weapons - small sword – also known as Kattari, and Trishula;
- 1.4 Hitting weapons – also known as Danda and Gade ;
- 1.5 Cutting weapons – Kadga, Machu , and Kodali , sword, axe etc; 2

Of the defensive weapons important is the sculptures of the Badami Chalukyas are three types of shields - circular, oval and Rectangular.



Fig. 6.3; sculpture depicted fort attack on veeragals

Courtesy- Shastri Shesha: Karnataka Veeragallugalu, 1982, Kannada Sahitya Paritshat, Bangalore, Platenos 57-58

All the four forts of the Chalukyas of Badami –Aihole, Badami, Pattadakal, Mahakuta or even in Alampur are all architecturally features are similar in pattern. In as far as the bastions are concerned Aihole, Badami and Alampur have similar shaped

² Ibid, PP- 134-135

square bastions, while Pattadakal and Mahakuta have bastionless walls. In Pattadakal fortified wall covers both the civic and the temple area and in Mahakuta only the temple area is fortified.



Fig. 6.4 : Chalukyan fort wall around Lower Shivalaya

The fort wall surrounding lower Shivalaya on the vertical scarp is 55 meters which is too high for aiming and shooting arrows the most familiar weapons during the period of early Chalukyas. As explained in Chapters IV the gateways are very massive and complex in nature.

The natural passages hinder an easy movement on entry into the fort without a prior knowledge of the plan. Enemies could have become easy target as they would get easily scattered being ignorant of the topography of the place. Lateral movement was also made impossible due to the terrain of the rock particularly on the northern hill chosen by the Pulakeshi for the construction of the fort. The Chalukyas made the best use of the natural protection as hill on the edges itself acted as a bastion, rather a natural bastion.

The northern hill actually projects from the Kalagi hill range and appears as though separated from it. It is the genius in selecting the fort by Chalukyas that becomes significant, as the later dynasties down to Tipu continued to prefer Badami itself speaks volume for the strategic location and the protection it extended naturally. For purpose of construction locally quarried stone was applied. Even now chisel marks are found on boulders at the eastern side of the fort, opposite to the Khileda Hanummappa gudi



Fig. 6.5 : Chisel marks on the boulders near Keleda Hanumappana Gudi

During the early phase, no binding materials were used in the construction. The piling up of the stone both big and small speaks of the skill as till date the piled up stone continue to remain intact. In this cyclopean method of fortification noticeable are the uneven sizes of the stones blocks, both in the horizontal and vertical orders.

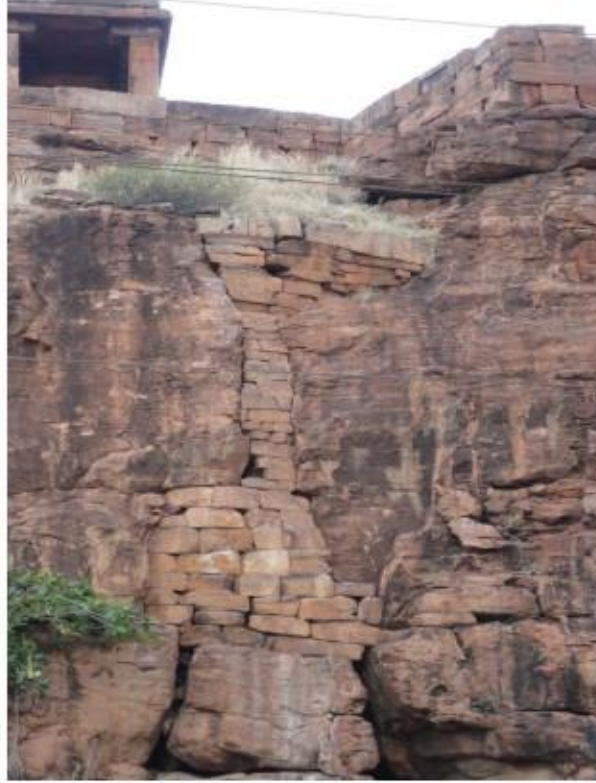


Fig. 6.6 : Pulakeshi fort pattern of Northern Hill

Pulakeshi built fort is the best example for Giri Durga with minimum effort with maximum utilization of natural resources.



Fig. 6.7 : Depiction of Army supply during war time

Courtesy- Shastri Shesha: Karnataka Veeragallugalu, 1982, Kannada Sahitya Paritshat, Bangalore , Plate no 68

THE SECOND STAGE (10 -11TH CENTURIES A.D)

With the decline of the supremacy of the Early Chalukyas, Badami attracted all successor powers. The Rashtrakutas during their reign taking knowledge of the economic importance of Badami strengthened not only the existing fort but also constructed a new one at the foot of the hill as discussed in detail in Chapter V. The fort wall was raised down the steep of the north hill at the southwestern point touching the Agastya Tirtha tank. The device adopted here is different from that of the hill fort as it is a Neladurga or Ground fort.

The actual site of the fort in the plain area indicates that there was noticeably distinct advancement in war techniques as seen in the building of the wall. The wall has a number of projecting angle and rectangular bastions. The wall constructed adjacent to the Agastya Tirtha stretches up the hill but below Tipu's bastion. The wall served the purpose of effective defence. The binding technology used for the walls are clay and pebbles beside small sized stones which are quite visible. The back of the wall is rather broad as it measures 4 meters at the ground level and tapers towards the top part, which is 2 meters wide. During 10th and 11th centuries several new techniques were evolved in the building of forts such as increase in the height of the fort wall, wide moats, bastions with battlements, parapet wall and a walk path. A veergal of 12th century depicts the fort, parapet wall and the army.

On the parapet are portrayed swords, shields, bows and arrows³. These Veeragals gives a fairly good idea of the various types of weapons used in wars such as Kadga, Katari, Barge, Baku, Sabala Kotna, Kakade used in wars.

³ Shastri Shesha: Karnataka Veeragallugalu (1982): Kannada Sahitya Paritshat, Bangalore

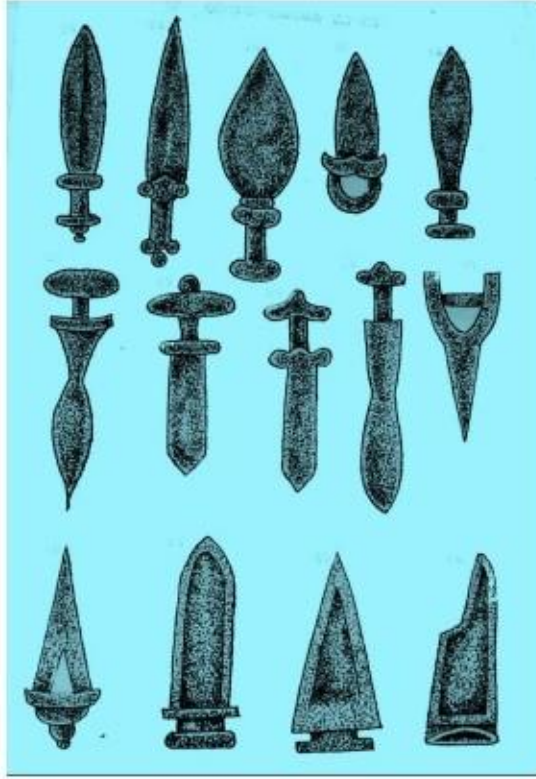


Fig.6.8 : Bargi , Baaku , Sabala Kotna, Kakade used in wars

Courtesy- Shastri Shesha: Karnataka Veeragallugalu, 1982, Kannada Sahitya Paritshat, Bangalore, plate no 34

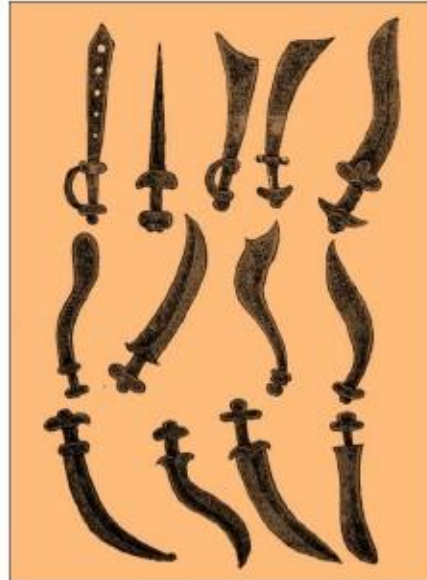


Fig.6.9 : various types of Swords of karnataka Katrai , Kadga,

Courtesy- Shastri Shesha: Karnataka Veeragallugalu, 1982, Kannada Sahitya Paritshat, Bangalore , Plate no .36

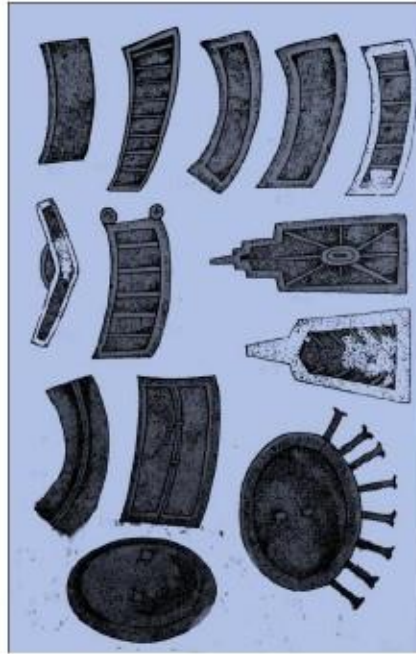


Fig .6.10: Early Shields of Karnataka

Courtesy- Shastri Shesha: Karnataka Veeragallugalu, 1982, Kannada Sahitya Paritshat, Bangalore, Platen o 30



Fig. 6.11: A Huge Bastion of Rastrakuta period

The fort wall is provided with the gateway on the west. The gate appears to be the main entrance facing south hill. The door frame of the entrance is enclosed partly by the projecting walls on the sides which act as buttresses. The gateway is actually a

pillared mantapa having four pillars. On the either side of the gateway is bastion. In the earlier fort while no provision was made for climbing bastions, under the Rasthrakutas flight of steps were added for the first time, indicating advancement in the defence technology. The bastions were built with huge blocks of stones and smaller block were used as it tapered upwards. In between the stone blocks, clay and pebbles were used as binding material.

THE THIRD STAGE (15TH-16TH CENTURIES A.D.)

Under Vijayanagara from time to time forts were constructed and renovation undertaken. It was during the reign of Hari Hara a small fort wall was raised near Agastya Tirtha on the northern hill. Circular bastions were constructed and for the first time circular bastions were introduced at Badami. Sadashivaraya also constructed a fort connecting the northern and southern hills, though no bastions were attached.



Fig. 6.12 : Fort wall of Sadashivaraya on the bund of Agastya Tirtha

An extensive fortified wall connecting the two hills and covering the entire Badami town was erected by the chieftains Krishnappa and Kondaraja, at the instance of Achyutaraya. Here too circular bastions were constructed at regular intervals. Significant in as far as Vijayanagara period is concerned is that again for the first time a moat was dugout at Badami. The stone blocks used for the moat are arranged systematically. The fort walls including that of the bastions have rectangular blocks which are roughly dressed but neatly arranged. This fort connecting the northern with the southern hill is 1175meters.

By 15th century highly advanced war equipments such rifles and cannons came in for use. These were due to extraneous influences such as of the Mughals in the North and the Portuguese and the Dutch in the South India⁴. But such developments though found at Bijapur and Bidar were not to be seen in Vijayanagara. This is well evident in Badami, despite its proximity to Bijapur where even traces are not available.

Fig.6.13: Bastion at the base of Southern Hill towards west direction

⁴ Joshi.S.K. (1985): Defence Architecture in Early Kamataka,, Sandeep Prakashan, New Delhi. PP-156- 157

FOURTH STAGE – 18 TH CENTURY

During this period as already discussed, besides a strong fort, renovation of Pulakeshi's fort was undertaken. In the construction ashlar masonry was adopted for the first time during the reign of the Mysore sultan. Circular bastions and demi-bastions were built during the period. On the southern hill where the new fort was erected the narrowest passage naturally available between the boulders to reach the flat surface at the top of the hill was chosen. This was a military tactic to avert the enemy attack. The two gateways one at the bottom beside the cave no III and another gateway about 100 meters are both very narrow, so also the pathways in the inside of the gateway are so narrow that they make it inaccessible for a big force to troop in at a time.



Fig. 6.14 : Gate way no 2 in a steep valley on Ranamadala Hill, Badami

The steps are also made very steep, narrow and uneven so as to deter the enemy. The natural rock formation is best utilized for purposes of defence. New weapons were introduced for the first time and this is well evident in the architectural development in

the forts. In addition to the traditional bows and arrows, swords and shields , guns mortars or short – barreled cannons for short distance firing , large sized cannons fixed on carriages came into usages One significant advancement was the manufacture of rocket technology which came in for extensive use during the wars.

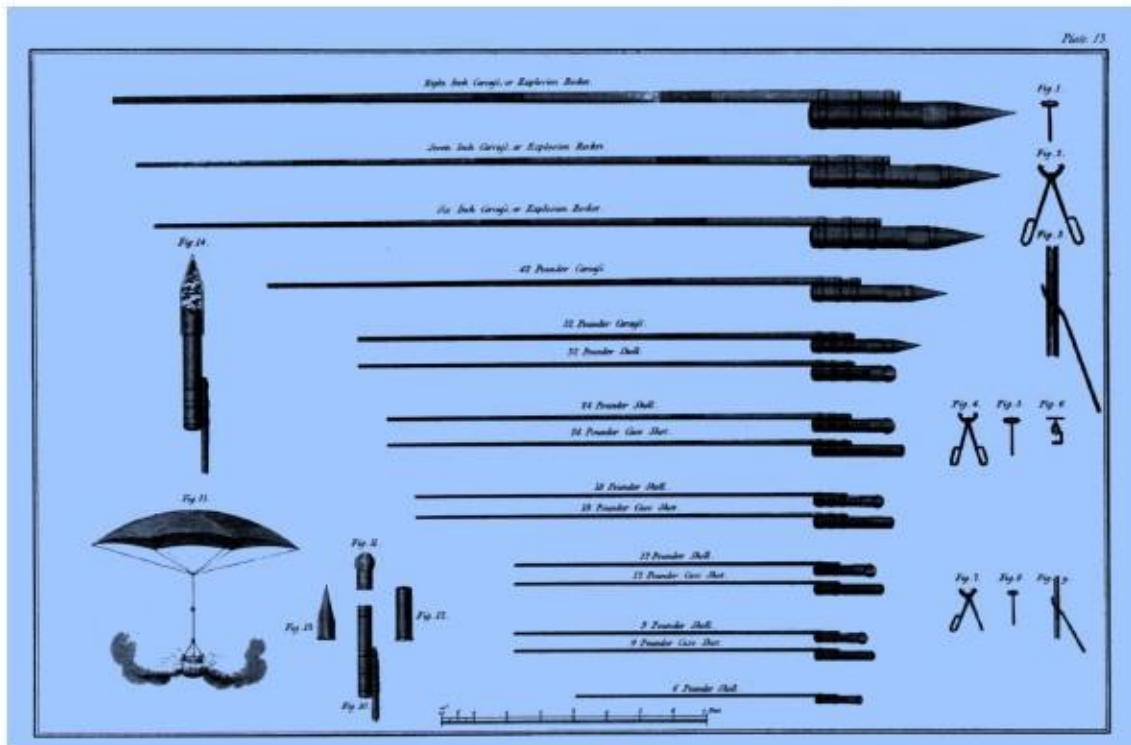




Fig.6.16 : Undergroud Magazine with foliated arches, Northern Hill, Badami

Alongside the fort walls were constructed parapet with loopholes. It not only gave coverage for the troop stationed inside the fort, but also strengthened the fort walls. Bastions were another important part of the fort. Tipu's bastions were usually circular in shape and this feature was common in all the fortification of Tipu's period. Compared to the earlier bastions of Badami, that of Tipu is wide, strong and spacious. This was essential as cannons were widely used. The banquette's that is the elevation of earth within the fort usually three to four feet wide from the top of the parapet was also strengthened. Adjacent to the parapet was a walk path constructed for the first time for the movement of infantry and supply of arms and ammunition.

Demi bastions were built in spaces where regular bastions could not be constructed. Two such bastions are found on the extreme northern side of the fort. In all probability mortar s and guns were used.



Fig. 6.17: Parapet wall of Southern wall, Badami

Introduction of new weapons compelled a change in the fort architecture. The height and thickness of the walls, parapets were increased.



Fig. 6.18 : Cannon on the Northern Hill



Fig. 6.19 : Cannon on the southern hill



Fig. 6.20 : Guard room with a window on the Southern Fort of Tipu

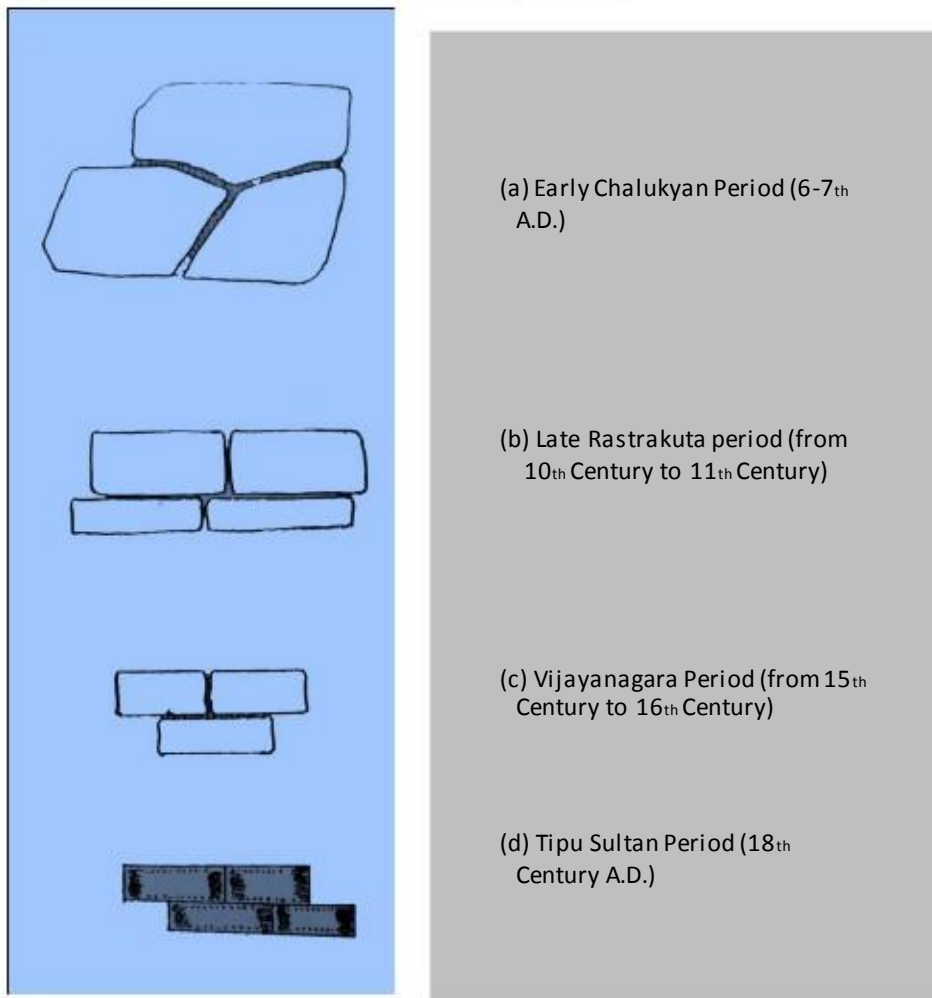


Fig. 6.21 : Arrangement of Stone Blocks in Fort Walls of different periods at Badami

Badami thus witnessed four significant stages of development and changing patterns of defence architecture from the 6th to 18 century. Each face had a distinct architectural characteristic which are visible in the remains of the original fortifications as well as in the renovated and reconstructed fort walls.

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CONCLUSIONS

The Forts at Aihole, Badami and Pattadakal along with Mahakuta and Alampur are best examples of the changing patterns in fort architecture as well as technology. A study of the defence architecture of the above places has hardly received the required scholarly attention. If brief studies on Aihole and Badami have been undertaken by a few scholars, Pattadakal, Mahakuta and Alampur find passing references. Hence, it was found compelling to undertake an extensive research on the area.

Some of the Archaeologists, epigraphists and historians who have worked extensively on the early Chalukyan period were also consulted prior to undertaking research on the area chosen for study. Some of them have extended valuable suggestions even in identifying the areas that had remained unexamined.

Aihole, Badami, Pattadakal, more so, the former two places had emerged as important economic zones since 2nd century A.D. As discussed in Chapter –I and III, Ptolemy makes a mention of Badami as well as Pattadakal. From the time of the Chalukyas of Badami all the three places became important power centers, especially Badami as it became the second capital of the Chalukyas, from the reign of Pulakeshi – I till the eclipse of the Chalukyan dynasty.

Post Chalukyan period also Badami continued to be important politically and militarily till the end of 18th century. Moreover, Aihole, Badami, Pattadakal and Mahakuta were also important cultural centers from the Pre-Chalukyan period and into the later times.

It is truism that structures erected for purpose of defence are in a state of ruination. Yet they throw interesting light on the patterns of architecture from 6th to

18th century A.D. Of the early Chalukyan defence architecture Aihole and Alampur which are Neladurgas are very similar in the structural pattern and layout, including the shape of the bastions which are rectangular in shape, a feature of the early Chalukyan fort architecture. The fort of Badami on the Northern hill built by Pulakeshi-I is the earliest fort at Badami and is distinct in its plan, as it is a Giridurga.

An Intelligent use of the naturally available rocks and of the cliff of the hill has been made. At the base level the gaps in between the boulders have been filled with just stones and gateways provided along with roughly cut steps, it is at the cliff of the hill that a strong fortified wall was raised. So, the entire stretch of the fortified wall may have been close two kilometers, however, the ruined walls now measure only 937.50 meters. At the eastern side of the Northern Hill, beside the water pond are a few brick remains which may be of Pre-Chalukyan period which needs to be investigated.



Fig 7.1 Earliest pottery of 6th to 7th century A.D found on the surface of Northern Hill during field study

Pattadakal and Mahakuta again have certain similarities. Without any bastions the fortified wall at both the places are in a straight line and rectangular shape. The Pattadakal wall encompasses the civic area including the temple complex, though today traces of only the base of the wall may be identified. At Mahakuta the wall is rectangular in shape and encloses only the temples, which are about eighteen in number.

As the surrounding region is covered with by a forest it may have necessitated covering the temple complex with a fortified wall to protect the temples, treasury as well as provide protection to the people within the complex even from wild animals.

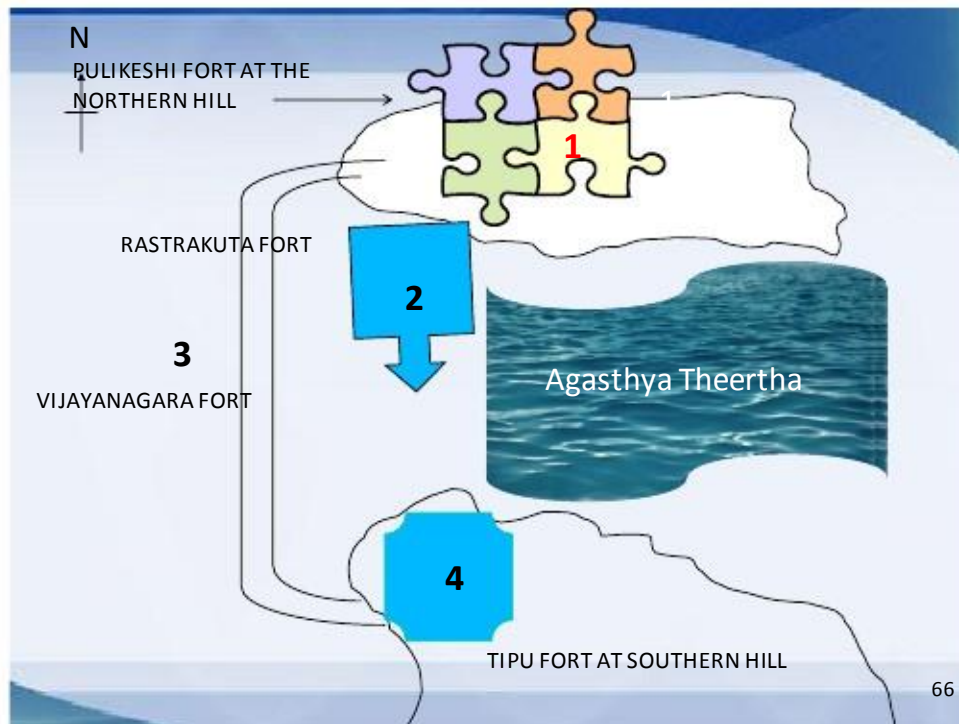


Fig. 7. 2 : Forts of Pulakeshi, Rastrakuta, Vijaynagara and Tipu at Badami

The succeeding dynasties also chose Badami alone for its strategic location. It was convenient politically, economically and militarily. The Rastrakutas who succeeded the Badami Chalukyas constructed a Neladurga here. Compared to the Chalukyas, the Rastrakutas brought in several changes in the building technology.

The height of the fort wall was raised, and large bastions rectangular in shape were introduced. The size of the gateways and the thickness of the walls were also increased. There may have been a moat but as the area surrounding the fortification and within the fort has been encroached by the locals and converted into dwelling places, no trace of the moat is available.



Fig. 7.3 : Encroachment of Rastrakuta Fort at Badami

The remains of the Vijayanagara Neladurga as well as the renovation and reconstruction of the old forts undertaken by the Rayas shows that for the first time Circular bastions were introduced for the first time.



Fig.7.4 : Topography of Kalatgi hill range around Agastya Tirtha, Badami

Courtesy: www.googleearth.com

The shift from Square to circular shape of the bastion was for purpose of cannons. In the forts reconstructed by Vijayanagara at Badami also circular bastions were built. Mortar was used for the first time under Vijayanagara as a binding material.

This may be seen in the exterior walls of the Vijayanagara fort as well as those that got reconstructed. Very wide moats were also were brought in as an additional feature in defence architecture at Badami. The length of the fort compared with the earlier forts is very extensive measuring 1175 meters. The moat is today covered up

with dwellings, and parts of the moat have become drainage, by which the entire moat is destroyed. The stone blocks used in the construction of the fort walls are smaller and symmetrical as well as closely arranged.



Fig. 7.5 : The Ruined Wall of Vijayanagara Fort, Badami

Further under Tipu Sultan Badami became an important province in the northern part of Karnataka. The Nizam as well as the Mahrattas had also been vying to occupy the region. It was essential for him to thwart the allied forces of his adversaries especially the Marattas who were attempting an incursion in the region. These compulsions made Hyder and later Tipu to strengthen Badami by constructing a new fort on the Southern Hill and he took to renovating the old forts on the Northern hill. Advanced armaments large sized cannons, guns; mortars necessitated building magazines for storage.

The walls constructed during his period were stronger and compared to Vijayanagara the arrangement of the stone blocks is finer. The bastions were circular in

shape and stronger. Significant is the provision made for the first time to place cannons at the bastions. Moreover, the walk path built along the parapet wall in the fort was feature introduced for the first time. Loopholes cut into the parapet were essential for shooting and observing the movement of the enemy army was another important advancement made in the defence technology at Badami.

Such of the technological advancements from 6th to 18th century itself speaks of the relevance especially Badami held down the centuries. The four phases of development of fort architecture is an attestation of the advantages it held out politically and economically as it was lying to the south of river Krishna and north of Tungabhadra.

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